



## REPORT

ON

# The Continuance of Protection to the Non-Ferrous Metals Industry



सत्यमेव जयते

## BOMBAY, 1962

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GOVERNMENT OF INDIA  
MINISTRY OF COMMERCE AND INDUSTRY

(Department of International Trade)

New Delhi, the 16th November, 1962.

**NOTIFICATION**

**Tariffs**

**No. 22(1)-T.R./62-I.**—In exercise of the powers conferred by sub-section (1) of section 3A of the Indian Tariff Act, 1934 (32 of 1934), as in force in India and as applied to the State of Pondicherry, the Central Government hereby directs that with immediate effect there shall be levied on the articles specified in column (1) of the Table hereto annexed, when imported into India or the said State, a duty of customs of such amount as is specified in the corresponding entry in column (2) thereof.

THE TABLE

Name of articles	Amount of duty of customs (inclusive of the duty chargeable under sub-section (1) of section 2 of the Indian Tariff Act 1934, and any additional duty leviable under any other law for the time being in force)
(1)	(2)
Extruded copper sections . . .	40 per cent <i>ad valorem</i> (Preferential). 50 per cent <i>ad valorem</i> (Standard).
Extruded brass sections . . .	40 per cent <i>ad valorem</i> .
Highly polished zinc sheets specially prepared for making process blocks. . . . .	35 per cent <i>ad valorem</i> .

C. S. RAMACHANDRAN,  
*Joint Secretary to the Government of India.*

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SHRI PRAMOD SINGH



GOVERNMENT OF INDIA  
MINISTRY OF COMMERCE AND INDUSTRY  
(Department of International Trade)

New Delhi, the 16th Nov., 1962.

**RESOLUTION**

**Tariffs**

**No. 22(1)-T.R./62.**—The Tariff Commission has submitted its Report on the continuance or otherwise of protection to the Non-Ferrous Metals Industry on the basis of an inquiry undertaken by it under Sections 11(e) and 13 of the Tariff Commission Act, 1951. Its recommendations are as follows :—

- (1) Protection to copper rods manufactured by rolling process, now covered by I.C.T. item No. 64(3), should be discontinued from 1st January, 1963.
- (2) Rolled brass rods, now covered by I.C.T. item No. 70(5), should be deprotected from 1st January, 1963.
- (3) Protection to lead sheets other than sheets for teachests [I.C.T. item No. 67(2)] should be withdrawn with effect from 1st January, 1963.
- (4) Protection to zinc sheets not otherwise specified [I.C.T. item No. 68(2)] and zinc strips [I.C.T. item No. 68(4)] should be discontinued from 1st January, 1963.
- (5) Protection to copper pipes and tubes [I.C.T. item No. 64(5)] should be continued for a further period of three years from 1st January, 1963, at the existing rates of protective duty, namely, 30 per cent *ad valorem* (preferential) and 40 per cent *ad valorem* (standard).
- (6) Protection to brass pipes and tubes [I.C.T. item No. 70(A)] should be continued for a further period of three years from 1st January, 1963, at the existing rate of duty of 35 per cent *ad valorem*.
- (7) Protection to extruded copper rods other than electrolytic copper rods [I.C.T. item No. 64(3)] should be continued for a further period of three years from 1st January, 1963, at the existing rates of protective duty, namely, 40 per cent *ad valorem* (Preferential) and 50 per cent *ad valorem* (Standard). Extruded copper sections should also be brought within the scheme of protection at the same rates of duty.
- (8) Protection to extruded brass rods [I.C.T. item No. 70(5)] should be continued for a further period of three years from 1st January, 1963, at the existing rate of duty, namely, 40

(ii)

per cent *ad valorem*. Extruded brass sections should also be included in the scheme of protection and subjected to a protected duty of 40 per cent *ad valorem*.

- (9) Protection should be granted to highly polished zinc sheets specially prepared for making process blocks for a period of three years from 1st January, 1963, and the rate of protective duty be fixed at 35 per cent *ad valorem*. A new item 68(2A) should be inserted in the First Schedule to the Indian Tariff Act, 1934 and all references to highly polished zinc sheets in I.C.T. item No. 72(2) should be deleted.
- (10) Early steps should be taken by the Development Wing to assess the present installed capacity of Metals & Ores Co., Calcutta for the manufacture of zinc sheets and strips and Metallica Works (Pvt.) Ltd., Bombay for the manufacture of lead sheets.
- (11) As the products of the non-ferrous semi-manufactures industry find increasing use in the manufacture of industrial items requiring higher standard of quality, it is necessary to assist the industry in procuring equipments required for modernisation and testing. This matter should be considered by Government and a phased programme of imports of the more essential equipment required by the several units be drawn up and implemented for stepping up their production and for improving the quality of their products.

2. Government accept recommendations (1) to (9). The duty recommended by the Tariff Commission in respect of extruded copper sections, extruded brass sections and highly polished zinc sheets, specially prepared for making process blocks which are at present not protected, is being brought into force with immediate effect by notification published separately into the Gazette. The necessary legislation will be undertaken in due course.

3. Government have taken note of recommendations (10) and (11) and these will be implemented to the extent possible.

### ORDER

ORDERED that a copy of the Resolution be communicated to all concerned and that it be published in the *Gazette of India*.

C. S. RAMACHANDRAN,

*Joint Secretary to the Government of India.*

## REPORT ON THE CONTINUANCE OF PROTECTION TO THE NON-FERROUS METALS INDUSTRY

1. Protection was first granted to the non-ferrous metals industry in 1948 and the scheme of protection included the levy of protective duties on certain non-ferrous alloys, semi-manufactures and manufactured articles. The period of protection was initially fixed upto 31st March 1950 and was extended by Government in consultation with the Tariff Board and later with the Tariff Commission year after year until 31st December 1957. Since then, there had been two inquiries, one in 1957 and the other in 1959 and in accordance with our recommendations protection to non-ferrous alloys and manufactures was discontinued. At present only the following semi-manufactures of non-ferrous metals and alloys are enjoying protection, namely, copper rods other than electrolytic copper rods, copper pipes and tubes, lead sheets other than sheets for teachests, zinc sheets not otherwise specified, zinc strips, brass pipes and tubes and brass rods. As the current period of protection is due to expire on 31st December 1962, the present inquiry has been undertaken by us under section 11(e) read with section 13 of the Tariff Commission Act, 1951 to review the protection enjoyed by the industry and to make recommendations with a view to its increase, decrease, modification or abolition according to the circumstances of the case.

2.1. In connection with the present inquiry, G.D. Binani & Co., Calcutta, suggested that the scope should be extended to include copper printing rolls for the textile industry. Kamani Metals and Alloys Ltd., Bombay requested that highly polished copper plates for making process blocks should be included in the scheme of protection. Metals and Ores Co. (a Division of Union Carbide India Ltd.), Calcutta suggested that highly polished zinc sheets used for similar purposes should be transferred to Indian Customs Tariff item No. 68(4) and assessed to a duty of 35 per cent *ad valorem*. The Indian Non-ferrous Metals Manufacturers' Association has supported the requests of Kamani Metals and Alloys Ltd. and Metals and Ores Co. We have given the matter our careful consideration. G. D. Binani & Co. has been licensed to manufacture 5000 copper printing rolls per annum and is expected to commence production in 1963 in technical collaboration with Revere Copper and Brass Inc. of New York. These printing rolls are at present assessed to a revenue duty of 15 per cent *ad valorem* under I.T.C. item No. 72(3) as component parts of textile machinery. It is open to us to recommend under section 11(a) of the Tariff Commission Act, 1951, protection to a sector of an industry which has not started production but which is likely to do so if granted suitable protection. But such protection should be based on a fair estimate of likely cost of production which was not made available in the present case. Further, the representatives of G.D. Binani & Co. admitted at the public inquiry that lack of tariff protection was not impeding the



implementation of their scheme. We asked them to renew their request for tariff protection for copper printing rolls if they consider it necessary after they have commenced production on a commercial scale and are also in a position to furnish cost data for a reasonable period of, say, six months. They accepted our advice.

2.2. As regards highly polished copper sheets for making process blocks, they are assessed to a revenue duty of 15 per cent *ad valorem* (plus a countervailing excise duty of Rs. 300 per tonne) under I.C.T. item No. 72(2), which covers printing and lithographic materials. Kamani Metals and Alloys Ltd., Bombay has installed a polishing machine with an annual capacity of 120 tonnes and is still in an experimental stage of manufacturing these sheets. Further, it was not possible for us to examine the cost of production of this item by Kamani Metals & Alloys Ltd. as it is still in intermittent trial production. In the circumstances we are unable to consider this item for purposes of the levy of a protective duty at this stage. The company may renew its claim after these sheets have begun to be manufactured on a commercial scale when data relating to cost of production over a reasonable period may also be available.

2.3. Highly polished zinc sheets for making process blocks are also assessed to a revenue duty of 15 per cent *ad valorem* under I.C.T. item No. 72(2) (plus a countervailing excise duty of Rs. 300 per tonne). Metals & Ores Co., Calcutta commenced the manufacture of these sheets on a commercial scale in February 1962. The quality of its product is stated to be acceptable. Our Cost Accounts Officer has also assessed the cost of production of these zinc sheets along with that of zinc strips for batteries and addressograph zinc sheets manufactured by the company. We have, therefore, decided to include this item in the scope. The present inquiry embraces, therefore, the following products of copper, lead, zinc and brass :—

	Indian Customs Tariff item No.
(i) Copper rods, other than electrolytic copper rods . . . . .	64(3)
(ii) Copper pipes and tubes . . . . .	64(5)
(iii) Lead sheets, other than sheets for teachests . . . . .	67(2)
(iv) Zinc sheets, not otherwise specified . . . . .	68(2)
(v) Zinc strips . . . . .	68(4)
(vi) Brass pipes and tubes . . . . .	70A
(vii) Brass rods . . . . .	70(5)
(viii) Highly polished zinc sheets specially prepared for making process blocks . . . . .	72(2)

3.1. Questionnaires were issued in January 1962 to producers, importers and consumers of non-ferrous semi-manufactures covered by the inquiry. Simultaneously a press note was issued inviting firms, associations or persons interested in the inquiry to obtain copies of the relevant questionnaires and send their replies.

**3. Method of inquiry**

The Development Wing was requested to furnish a memorandum on the industry indicating the progress made by it since the last inquiry and its present position. The Development Commissioner, Small Scale Industries, was addressed for similar information in respect of the small scale sector. Information regarding c.i.f. prices was sought from the Collectors of Customs at principal ports. The Embassies of India in Belgium and West Germany and the High Commission of India in the U.K. were requested to furnish the current f.o.b./c.i.f. prices of the non-ferrous semi-manufactures under consideration. The Geological Survey of India, the Indian Bureau of Mines and the Indian Standards Institution were requested to furnish information on certain specific matters relevant to the inquiry. All State Governments were addressed for their views on the question of continuance of protection to the industry. A list of firms, associations and Government departments to whom questionnaires and letters were issued and from whom replies or memoranda were received is given in Appendix I.

3.2. A list of the factories visited by us and our officers is given in Appendix II. One of our Cost Accounts Officers was deputed to examine the cost of production of protected categories of non-ferrous semi-manufactures at three units, namely, National Pipes and Tubes Co. Ltd., Metals & Ores Co., Calcutta, and Standard Metal Works (Private) Ltd., Bombay. A public inquiry into the industry was held on 26th June, 1962 at Bombay. A list of persons, who attended it, is given in Appendix III.

4.1. We set out below the recommendations and suggestions made in our last Report (1959) on matters other than tariffs and the extent to which they have been implemented.

**4. Implementation of recommendations made in the last Report.**

**4.2. Recommendations :**

4.2.1. "All the units in the industry should show due awareness of their obligations as a protected industry and introduce a proper system of costing without delay. The introduction of this system should be reported to the Commission by 30th June 1960".

Although efforts have been made by a few units in the industry to implement our recommendation, the results have not been up to our expectation. The Indian Non-ferrous Metals Manufacturers' Association had arranged for the survey of certain units by a Cost Consultant of Robson, Morrow & Co., Bangalore, with a view to recommending a proper costing system. The report of the cost consultant was forwarded to the member-firms of the Association. The Association has stated that it is for the units interested in having a proper costing system

to take further action. At the public inquiry the Chairman of the Development Council for non-ferrous metals industry, who is the President of the Indian Non-Ferrous Metals Manufacturers' Association, also expressed the view that the Development Council was not in a position to ensure that its recommendations were implemented. Among the three units whose costs have been examined by us this time, Metals and Ores Co., Calcutta (a Division of Union Carbide India Ltd.) alone has a proper system of costing. We also understand that the introduction of the system of costing is still in initial stages at other main units of the non-ferrous metals industry. The importance of a proper costing system in industries (whether protected or not) cannot be over-emphasised. Without such a system it is not possible even for the management to ascertain at any given time the variations in the unit cost of products and properly to control them. Indeed, it is essential that both the Development Council and the Indian Non-ferrous metals manufacturers' Association should make an earnest endeavour to create cost consciousness at all levels of management in every one of the industrial units looked after by them. We strongly urge that all the units in the industry should, in their own enlightened self-interest, take early and effective action in this regard.

- 4.2.2. "Kamani Metals and Alloys Ltd., and Indian Smelting and Refining Co. Ltd., should announce their prices of commercial sheets of brass and copper like Indian Copper Corporation and also ensure that their agents or stockists charge only list prices".

We are informed that the selling prices of commercial sheets of brass and copper are published by Kamani Metals and Alloys Ltd., and Indian Smelting and Refining Co., Ltd., in important daily newspapers once a month.

#### 4.3. Suggestions :

- 4.3.1. "Government may extend to the industry necessary facilities and assistance in diversifying the range of productions".

There has been some progress towards diversification subsequent to the last inquiry. As stated earlier in paragraph 2, Metals and Ores Co., Calcutta, has already commenced production of highly polished zinc sheets for making process blocks. It is also producing callots (discs punched from zinc sheets) for batteries and coated zinc electrodes. Kamani Metals and Alloys Ltd., Bombay is experimenting to manufacture highly polished copper sheets. Metallica Works Private Ltd., Bombay, has been licensed to manufacture lead sheets of width 6' and above and those required by the chemical industry and is expected to commence production shortly. Manufacture of copper tubes of smaller diameters will be undertaken by Devidayal (Sales) Private Ltd., Bombay. This company has also plans to manufacture brass alloy tubes above 1" diameter for various industries and phosphorus deoxidised copper tubes below 18 gauge in coils for refrigeration and air conditioning industry. Kamani Tubes Private Ltd., Bombay has also a programme to manufacture certain types of condenser tubes used

in the construction of ships and locomotives and also tubes required for refrigeration and oil engine industries. National Pipes and Tubes Co. Ltd., Calcutta, which has a licence to expand its extrusion capacity for tubes from 300 to 900 tonnes a year, has plans to manufacture condenser tubes and heat exchanger tubes. Both Devidayal (Sales) Private Ltd. and Kamani Tubes Private Ltd. have entered into technical collaboration with reputed foreign firms.

- 4.3.2. "The Union Government should impress on the State Governments concerned the importance of exercising greater vigilance over the activities of small scale units in their respective territories for preventing unauthorised sales of imported copper and zinc".

The Development Wing has informed us that permits for copper are issued by the Controller of Non-Ferrous metals on the specific recommendations of the State Directors of Industries, but the vigilance work relating to proper utilisation of allocated metals by the small units is the responsibility of State Directors of Industries. The Development Commissioner, Small Scale Industries has observed that raw materials supplied to small scale units are very limited and barely sufficient to meet even one-sixth of their requirements. In the circumstances he has expressed doubts whether they would dispose of such scarce raw materials in an unauthorised manner, particularly as it is quite profitable to manufacture and sell rods and strips. Nevertheless, it was mentioned at the public inquiry that the margins between the landed cost of metal and the current market price being about Rs. 2500 per tonne in the case of copper and Rs. 1500 per tonne in the case of zinc, petty quota holders find it easy and more profitable to dispose of their quotas in the open market.

- 5.1. At the time of our last inquiry in 1959 there were seven units (six registered with the Development Wing) engaged in the manufacture of one or more of the semi-manufactures now in the protected list. The names of the units and the items manufactured by them are given below :—

Sl. No.	Name of the unit	Semi-manufactures produced
1	2	3
<b>A. Units borne on the list of the Development Wing</b>		
1	National Pipes & Tubes Co. Ltd., Calcutta	Copper/brass sheets, rods, sections and tubes & zinc/lead sheets.
2	Jaipur Metals & Electricals Ltd., Jaipur	Copper strips and copper/brass rods.
3	Kamani Metals & Alloys Ltd., Bombay	Copper/brass/zinc/lead sheets and strips.

1	2	3
4	Metals & Ores Co. (a Division of Union Carbide India Ltd.), Calcutta.	Zinc strips.
5	Jayant Metal Manufacturing Co., Bombay	Copper/brass strips and brass rods.
6	Hooseini Metal Rolling Mills Private Ltd., Bombay.	Copper/brass/lead sheets.
<b>B. Other Units</b>		
7	Standard Metal Works Private Ltd., Bombay.	Lead sheets.

5.2. Since then, Kamani Metals & Alloys Ltd. has practically discontinued the rolling of zinc sheets and uses its capacity mainly for rolling copper and brass sheets. Jayant Metal Manufacturing Co. has no rolling capacity and gets its brass rods rolled from outside. These two units agreed at the public inquiry that their names could be deleted from our list as manufacturers of the respective items, namely, zinc sheets and brass rods. National Pipes and Tubes Co. Ltd. has expanded its extrusion capacity for copper and brass solids (rods and section) and hollows (tubes and pipes) from 2300 tonnes to 3300 tonnes. It has practically discontinued production of zinc and lead sheets. Subsequent to our last inquiry the following three units commenced production of one or other semi-manufactures in the protected list.

Sl. No.	Name	Products	Date of commencement of production
1	Devidayal (Sales) Pvt. Ltd., Bombay	Copper tubes Brass tubes	July, 1960 Feb., 1961.
2	Kamani Tubes Pvt. Ltd., Bombay	Brass rods Brass tubes	August, 1960 Expected shortly.
3	Metallica Works Pvt. Ltd., Bombay	Lead sheets	May, 1962.

Metallica Works (Private) Ltd., Bombay has established the capacity for production of lead sheets up to 5' width and has plans to import a bigger rolling mill for the manufacture of wider lead sheets.

5.3. Thus at present there are eight units manufacturing one or more of the protected items of non-ferrous semi-manufactures, and seven of them are registered with the Development Wing. Among them, three units manufacture copper/brass solids; three, copper/brass hollows; three, lead sheets (other than sheets for teachers) and one,

1	2	3	4	5
(C) <i>Lead sheets (other than sheets for teachests)</i>				
		Tonnes	Tonnes	
1	Hooseini Metal Rolling Mill Pvt. Ltd., Bombay.	1,200	1,200	..
2	Standard Metal Works Pvt. Ltd., Bombay.	1,200	..	Not registered with the Development Wing. The unit has given its daily capacity as 4 tonnes.
3	Metallica Works Pvt. Ltd., Bombay.	300	1,200	..
		2,700	2,400	
(D) <i>Zinc sheets and strips</i>				
	Metals & Ores Co., Calcutta (a Division of Union Carbide India Ltd.).	2,000	2,200	The company is now manufacturing only strips.
		2,000	2,200	

5.4. The manufacturers have furnished their capacities on single shift basis while the Development Wing's figures for each unit are for maximum utilisation of existing plant and machinery. For purposes of assessing the installed capacity in the country for the manufacture of items under consideration, we have decided to adopt the figures supplied by the Development Wing except in the following cases. Metallica Works Private Ltd., has at present a rolling mill capable of producing one tonne of lead sheets of width upto 5' per day. Its capacity on the basis of maximum utilisation of its plant and machinery cannot, in our view, exceed 600 tonnes a year. Metals & Ores Co. achieved a production of 3258 tonnes in 1960 and 3830 tonnes in 1961. Its production during the first four months of 1962 was 1065 tonnes. It seems therefore that the capacity of this unit on the basis of maximum utilisation is substantially higher than 2200 tonnes furnished by the Development Wing. For the purpose of this Report we have assessed the capacity of this unit at 3400 tonnes a year (average production of 1960, 1961 and the first four months of 1962). We recommend that early steps should be taken by the Development Wing to assess the present installed capacity of each of these two units.

5.5. The present aggregate capacity for various items is indicated below :—

Item	Present Capacity
	(Tonnes)
1. Copper/brass solids (rods and sections other than electrolytic copper rods)	4,100
2. Copper/brass hollows (pipes and tubes)	4,900
3. Lead sheets (other than sheets for teachests)	3,000
	(inclusive of Standard Metal Works).
4. Zinc sheets and strips	3,400

zinc sheets and strips. The names of these units and their capacities under different 'product-heads' are shown in the following table.

Sl. No	Name of the unit	Single shift capacity as furnished by the manufacturers	Capacity based on maximum utilisation of plant and machinery as intimated by the Development Wing	Remarks
1	2	3	4	5
		(Tonnes)	(Tonnes)	
(A) <i>Copper and brass solids (rods and sections other than electrolytic copper rods)</i>				
1	National Pipes & Tubes Co. Ltd., Calcutta.	3,000	3,000	Extrusion capacity.
2	Jaipur Metals & Electricals Ltd., Jaipur.	600	600	Rolling capacity— (Inclusive of capacity for electrolytic copper rods, the company has claimed its overall rolling capacity to be 3,000 tonnes on single shift).
3	Kamani Tubes Pvt. Ltd., Bombay.	500	500	Extrusion capacity
		4,100	4,100	
(B) <i>Copper and brass hollows (pipes and tubes) Extrusion capacity</i>				
1	National Pipes & Tubes Co. Ltd., Calcutta.	300	300	..
2	Devidayal (Sales) Pvt. Ltd., Bombay.	1,500 to 2,800	3,600	..
3	Kamani Tubes Private Ltd., Bombay.	1,000	1,000	Production will commence shortly.
		2,800 to 4,100	4,900	

The aggregate capacities given above do not take into account the capacities in ordnance factories, railway workshops and small scale units.

5.6. *Small scale sector.*—According to the Development Commissioner, Small Scale Industries, there are 28 units engaged in the production of the non-ferrous semi-manufactures under consideration. He has stated that due to inadequate supply of raw materials the capacity actually utilised has been very low. Particulars regarding their location, items manufactured, capacity and production as furnished by him are given in the following table.

State	No. of units	Capacity (Tonnes)	Production (Tonnes)		
			1959	1960	1961
Punjab	13	600 (Brass rods)	185	207.5	208.5
Bihar	4	550 (Brass rods)	N.A.	N.A.	N.A.
Rajasthan	2	N.A. (Brass rods)	N.A.	N.A.	N.A.
Mysore	1	N.A. (Copper rods)	N.A.	N.A.	N.A.
West Bengal	8	{ 600 (Lead sheets—2 units)	140	150	200
		{ N.A. (Zinc strips—1 unit)	N.A.	N.A.	N.A.
		{ 680 (Brass rods—5 units)	135	145	230
28					

One small scale unit in Madras, Leos Mercantile Corporation (Industrial Estate, Guindy, Madras 32) has claimed that it has been producing highly polished zinc and copper sheets, from 'mill-finish' sheets. It has no rolling mill for producing 'mill-finish' sheets of zinc and copper and has established only the facilities for polishing such sheets to the degree required for use in process blocks. Its annual capacity is stated to be 250 tonnes of zinc sheets and 250 tonnes of copper sheets.

5.7. *Production.*—The following table gives the production of the several semi-manufactures by units in the organised sector for 1959, 1960, 1961 and 1962 (January—April).

	(Tonnes)			
	1959	1960	1961	1962 (Jan.-April)
(i) Copper solids (rods and other sections) other than electrolytic	156	158	192	42
(ii) Brass solids (rods and other sections)	1,741	1,904	2,174	898
(iii) Copper hollows (pipes and tubes)	49	202	326	65
(iv) Brass hollows (pipes and tubes)	9	3	105	31
(v) Lead sheets	760	815	1,103	250
(vi) Zinc sheets	14	8	2	3
(vii) Zinc strips	2,788	3,258	3,830	1,065

Figures of production, unit-wise, are given in Appendix IV.



5.8. *Future expansion.*—We are informed by the Development Wing that National Pipes and Tubes Co. Ltd. has been permitted to expand its annual capacity for brass/copper hollows (extruded) from 300 to 900 tonnes. The firm, which has applied for import of necessary machinery, expects to establish this additional capacity by 1964. Shri G. D. Binani, Calcutta has been granted a licence to produce 600 tonnes per annum of brass/copper solids (extruded) and 1200 tonnes per annum of brass/copper hollows (extruded). He proposes to float a new company by the name of Multimetals Ltd. The factory will be located at Kotah in Rajasthan and is expected to commence production in 1963. Metallica Works Private Ltd. expects to instal its wider rolling mill shortly when its capacity for lead sheets will be raised to 1200 tonnes a year. Metal Corporation of India Ltd. has also been licensed to manufacture 5400 tonnes of lead sheets per annum and expects to commence production in 1964. We understand that its sheets will be mostly for its own internal consumption. Metals & Ores Co. expects to increase its production of zinc strips to 5500 tonnes by 1965 by adding balancing equipment. If all the above expansion plans materialise, the aggregate capacity in the country for manufacture of the protected categories of non-ferrous semi-manufactures will, by the end of 1965, be as indicated below :—

Item	No. of units	Total annual capacity in 1965
		(Tonnes)
(i) Copper/brass solids (rods and sections)	4	4,700*
(ii) Copper/brass hollows (pipes and tubes)	4	6,700
(iii) Lead sheets (other than sheets for teachests)	3	3,600
(iv) Zinc sheets and strips	1	5,500

(\*Extrusion capacity—4,100 tonnes and rolling capacity—600 tonnes.)

6.1. In our last Report we estimated that the domestic demand for 1959 would be 300 tons for copper rods (other than electrolytic), 800 tonnes for copper pipes and tubes, 2,000 tonnes for brass rods, 750 tons for brass pipes and tubes, 700 tonnes for lead sheets and strips and 3,000 tonnes for zinc sheets and strips. Our estimate of increase in demand was of the order of 5 per cent per annum. In connection with the present inquiry we have received divergent estimates of current and future demand from the Development Wing, manufacturers and importers. The data

received from these sources are tabulated in Appendix V. The estimates furnished vary in the following ranges.

(Tonnes)

	Estimates of current demand (1962)	Estimates of future demand (1964-65)
Copper/brass rods (other than electrolytic) . . . . .	4,000 to 4,400	6,000 to 10,000
Copper/brass pipes and tubes . . . . .	1,500 to 4,000	3,000 to 7,000
Lead sheets . . . . .	1,200 to 2,000	2,000 to 5,000
Zinc sheets and strips . . . . .	4,000 to 5,000	6,000 to 6,100

6.2. The apparent supply position in respect of the various semi-manufactures, based on indigenous production (paragraph 5.7) and imports (paragraph 9.2) during the last three years was as given below :—

(In Tonnes)

Products		Indigenous production	Imports	Availabi- lity
				[(2) plus (3)]
(1)		(2)	(3)	(4)
Copper rods, other than electrolytic.	1959	156	7	163
	1960	158	32	190
	1961	192	17	209
Brass rods . . . . .	1959	1,741	403	2,144
	1960	1,904	787	2,691
	1961	2,174	1,388	3,562
Total for copper/brass rods . . . . .	1959	1,897	410	2,307
	1960	2,062	819	2,881
	1961	2,366	1,405	3,771
Copper pipes and tubes . . . . .	1959	49	500	549
	1960	202	528	730
	1961	326	452	778

1	2	3	4
Brass pipes and tubes . . . . .	1959 9	976	985
	1960 3	1,175	1,178
	1961 105	1,298	1,403
Total for copper/brass pipes and tubes.	1959 58	1,476	1,534
	1960 205	1,703	1,908
	1961 431	1,750	2,181
Lead sheets, other than teachests sheets.	1959 760	67	827
	1960 815	63	878
	1961 1,103	343	1,446
Zinc sheets and strips . . . . .	1959 2,788	129	2,917
	1960 3,258	712	3,970
	1961 3,830	218	4,048

The above table indicates a steady rising trend of consumption of all the products during the three-year period. It also shows that even now we are dependent almost entirely on imports for our requirements of brass pipes and tubes. We have also been importing a sizeable quantity of brass rods and sections and copper pipes and tubes. It was urged by the industry that domestic production of these items could not be stepped up mainly for lack of balancing equipments such as annealing furnaces, draw benches, dies, etc. We are informed by our technical advisers that this is by and large correct. We understand that without spark erosion machines it is not possible for the industry to provide itself with tungsten carbide dies. Bright annealing furnaces have to be imported. Gear boxes may also have to be imported for fabricating draw benches. We are of the view that where the lack of such ancillary equipment operates as a curb on fuller utilisation of capacity it would be reasonable to allow the import of such items which are not manufactured indigenously.

6.3. The figures mentioned in paragraphs 6.1 and 6.2 above were discussed at the public inquiry. It was generally agreed that conditions of scarcity prevailed for pipes and tubes and also for rods of smaller sizes. After considering all aspects, we have estimated the demand for 1962 at 4,500 tonnes for copper/brass solids (rods and sections), 3,000 tonnes for copper/brass hollows (pipes and tubes), 1,500 tonnes for lead sheets (other than sheets for teachests) and 5,000 tonnes for zinc sheets and strips. We consider that the estimates of future demand in 1965 for the above semi-manufactures would be of the order of 8,000, 7,000, 2,500, and 6,500 tonnes respectively.

7.1. The principal raw materials used in the semi-manufactures under consideration are copper, zinc and lead. Except for a small production of copper and lead metals and of zinc concentrates, the bulk of requirements of the virgin metals is imported. The present position in regard to each of these metals is given below :

## 7. Raw materials

## 7.2. Copper :

7.2.1. Indian Copper Corporation Ltd. with its factory at Ghatsila (Bihar) is the only producer of fire-refined copper metal. Its production was 7,674 tonnes in 1959, 8,910 tonnes in 1960 and 8,336 tonnes in 1961. After meeting the requirement of its own rolling mills for production of brass/copper sheets and circles the bulk of the surplus is sold to the Director General of Supplies and Disposals and the balance is declared to the Development Wing (Metals Directorate) for allocation amongst industrial consumers. The quantities so allocated were 1,108 tonnes in 1960 and 1,322 tonnes in 1961. The Corporation's electrolytic copper refinery referred to in paragraph 10.2 of our last Report is expected to commence production in 1964. Its installed capacity will be 9,600 tonnes a year and it will use imported blister copper. The following table shows the estimated production and quantities of fire-refined and electrolytic copper to be made available for sale in future by Indian Copper Corporation.

Year	(Tonnes)			
	Fire-refined copper		Electrolytic copper	
	Production	Quantity available for sale	Production	Quantity available for sale
1962	9,200	1,600	..	..
1963	9,500	1,600	..	..
1964	9,700	1,800	6,000	6,000
1965	10,000	2,100	8,400	8,400

7.2.2. The second plant for the production of copper metal will be installed by National Mineral Development Corporation at Khetri where workable deposits of copper ore have been proved by the Indian Bureau of Mines. The capacity of this plant will be 22,000 tonnes per annum and it is expected to commence production by 1964. Accordingly the total availability of indigenous metal is expected to be 40,400 tonnes (10,000 tonnes of fire-refined and 30,400 tonnes of electrolytic copper) by 1965. Against this the Development Council for the Non-ferrous Metals Industry estimates the demand to rise to 170,000 tonnes by 1965.

## 7.3. Zinc :

7.3.1. Metal Corporation of India Ltd. is at present producing zinc concentrates and has an arrangement with a firm in Japan for smelting its zinc concentrates on a toll basis. Its own zinc smelter with a capacity of 18,000 tonnes, which is under erection at Udaipur in collaboration with a foreign firm, is expected to commence production by 1964. Production of zinc concentrates was 9,978 tonnes in 1959, 9,787 tonnes in 1960, and 9,253 tonnes in 1961. Recovery of metal was 5,494 tonnes in 1960 and 4,392 tonnes in 1961 and the entire quantity was allocated to Tata Iron & Steel Co. Ltd. and Indian

Iron & Steel Co. Ltd. Production of zinc is expected to increase steadily to 12,000 tonnes in 1964 and 18,000 tonnes in 1965. Against this the annual demand is estimated by the Development Council to rise to 185,000 tonnes by 1965.

7.3.2. G. D. Binani & Co., Calcutta obtained an industrial licence for setting up a zinc refinery to produce 12,000 tonnes of zinc a year from imported concentrates. The representative of the firm stated at the public inquiry that his scheme was under consideration of Government and that he did not expect the plant to be commissioned by 1965.

7.4. *Lead*.—Metal Corporation of India Ltd. has a lead ore milling and concentration plant at Zawar mines and a lead smelting factory at Tundoo (Bihar). Production of lead was 3,958 tonnes in 1959, 3,745 tonnes in 1960 and 3,664 tonnes in 1961 and is expected to increase steadily to 8,000 tonnes in 1965. Almost the entire quantity is sold by the Corporation. Here also the annual demand which is estimated by the Development Council to rise to 65,000 tonnes by 1965 will be far in excess of the domestic production of the metal.

#### 7.5. *Import control policy for raw materials :*

7.5.1. The import control policy for the current period (April 1962 to March 1963) is briefly stated below :—

7.5.1.1. *Copper*.—A quota of 100 per cent is allowed to established importers and the licences are valid for imports from U.S.A. only. The sale of imported copper is to be effected by established importers only against permits issued by the Controller of Non-ferrous Metals at prices not exceeding  $3\frac{1}{2}$  per cent over the landed cost. Actual users' applications from scheduled industries are considered *ad hoc* by the Chief Controller of Imports (hereinafter referred to as C.C.I.) in consultation with the Development Wing.

7.5.1.2. *Zinc*.—A quota of 30 per cent is allowed to established importers who are required to dispose of the imported metal in accordance with the directions of the Controller of Non-Ferrous Metals. Up to  $7\frac{1}{2}$  per cent of the face value of licences can be used for import of highly polished zinc sheets. Actual users' applications from scheduled industries and from units borne on the books of the Iron & Steel Controller are considered *ad hoc* by C.C.I. on the recommendations of the Development Wing. Requirements of the non-scheduled sector are met from canalised imports.

7.5.1.3. *Lead*.—Requirements of Scheduled Industries are considered *ad hoc* by C.C.I. on the recommendations of the Development Wing and those of non-scheduled sector are met from canalised imports.

7.5.1.4. *Brass*.—A quota of 50 per cent is allowed to established importers. The quota licences are valid for import of copper unwrought and zinc unwrought in equal proportions. Sales are to be effected only against permits issued by the Controller of Non-ferrous Metals at prices not exceeding  $3\frac{1}{2}$  per cent over the landed costs. Actual users' applications from sugar industry for import of brass perforated sheets are considered on an *ad hoc* basis by the Deputy

Chief Controller of Imports (Central Licensing Area), New Delhi in consultation with the Ministry of Food and Agriculture (Directorate of Sugar and Vanaspati).

7.5.1.5. In view of the present shortage of foreign exchange the Government of India announced in June 1962 a general cut of 50 per cent in the quotas of established importers. As regards actual users, the extent of cut is decided in each case on merits.

7.5.2. Figures of import of raw materials, namely, copper, zinc, brass and lead during 1959, 1960, 1961 and 1962 (January—March) are given in Appendix VI.

7.6.1. The industry has represented that it has not been able to import its full requirement of raw materials even to work single shift capacity. It has urged that steps should be taken to import raw materials (virgin metals and scrap) rather than semis and that such a measure, apart from making a saving in foreign exchange, would enable the industry to make fuller utilisation of its capacity and also to reduce costs. The representative of the Development Wing explained that import of non-ferrous metals is made within a ceiling of foreign exchange made available for it and that it is distributed between the small scale sector, established importers and the various consuming units borne on the lists of the Development Wing. Actual imports are made through State Trading Corporation (S.T.C.), established importers and actual users. Imports by S.T.C. are reserved for distribution amongst small scale units. The requirements of the units borne on the list of the Development Wing are met from period to period on a standard basis of allocation fixed in terms of their past production—the basic year of production for such allocation at present being 1956. This basis is as follows :—

Brass/copper sheets, strips, tubes . . . . .	72 per cent of 1956 level of production.
Non-ferrous alloys . . . . .	81 per cent of 1956 level of production.
Industrial sheet of brass/copper . . . . .	100 per cent of 1956 level of production.
Zinc sheets/strips . . . . .	<i>Ad hoc</i> basis depending upon past production and demand.

Units which commenced production after 1956 are given initially raw materials on an equitable percentage of their licensed capacity. This allocation is slightly increased after due scrutiny of their performance and the needs of the country. In certain periods when extra foreign exchange becomes available, *ad hoc* allocations are made to existing units manufacturing the concerned semis depending on the requirements of these products as also the quality which the particular manufacturer is capable of producing.

7.6.2. The question of imports of raw materials instead of semis (which, for example, were imported by S.T.C., in 1961-62 in substantial quantities) was discussed at the public inquiry. We were informed that these imports took place under certain trade agreements and also against rupee payment and that it was not possible to import

raw materials from those sources. We were also informed that in planning imports of semis, care was taken to confine them as far as possible to such types and sizes as were in acute short supply in the country. Mention was also made that industries consuming non-ferrous semi-manufactures are asked to import virgin metals or alloys and get the semi-manufactured by one of the existing units.

7.7. *Import duty on raw materials.*—Import of copper unwrought [ICT 64(2)], lead ingots, pigs and scrap [ICT 67(3)] and zinc unwrought [ICT 68(1)] is allowed free of duty. Copper in any crude form including ingots, bars, blocks, slabs, billets, shots and pellets is subject to a countervailing excise duty of Rs. 100 per tonne. Brass, unwrought, ingots, cakes, slabs and blooms [ICT 70(4)] are subject to a revenue duty of 10 per cent *ad valorem*. Copper, zinc, lead and brass scraps are duty-free.

7.8. *Excise duty on raw materials.*—An excise duty of Rs. 100 per tonne is leviable under the Finance (No. 2) Act, 1962 on copper and copper alloys containing not less than 50 per cent by weight of copper in any crude form including ingots, bars, blocks, slabs, billets, sheets and pellets.

8.1. In our last Report we had observed that the quality of brass and copper (solids and hollows) and of zinc strips was comparable with that of imported products. This view has also been expressed by the Development Wing on this occasion. The Director General of Supplies and Disposals has stated that the consuming centres have not reported any defects in the indigenous products. Amongst consumers though a large number have expressed satisfaction with the quality of indigenous products, a few have pointed out specific defects. These relate mainly to the products of new producers like Kamani Tubes Private Ltd. and Devidayal (Sales) Private Ltd. which commenced operation during the second half of 1960. The representatives of the units admitted that some defective materials had been sold in the market in the initial stages but that they had subsequently taken steps to rectify them. We observe that the industry suffers from certain handicaps which may be responsible for the occurrence of defects. One of the units makes use of electric arc furnaces and another oil-fired furnaces for melting and alloying. In both cases closer control could be exercised by making use of low frequency electric induction furnaces. Water cooled moulds could improve surface of billets. One unit uses an old oil-fired annealing furnace which should be replaced urgently by an electrical furnace with thermostatic control. Devidayal (Sales) Private Ltd. pressed its claim for import of necessary laboratory equipment particularly a spectrograph instrument. The use of out-moded appliances is responsible for not only inferior quality of products but also avoidable losses of valuable metals. As the products of the industry find increasing use in the manufacture of industrial items requiring higher standard of quality, it is necessary to assist them in procuring equipments required for modernisation and testing indicated above. We recommend that this matter be considered by Government and a phased programme of imports of the more essential equipment required by the

10.1. Exports of copper bars, rods, sections, pipes and tubes are allowed under licence. Lead sheets, zinc sheets, zinc strips, brass pipes and tubes and brass rods are not controlled for purposes of exports and no export licence is required. Notwithstanding such liberal policy, only small exports have taken place, namely, 0.05 tonne of brass tubes/pipes and 135.44 tonnes of zinc sheets and strips during 1959, 247.87 tonnes of zinc sheets and strips during 1960, 0.05 tonne of copper tubes/pipes and 291.55 tonnes of zinc sheets and strips during 1961 and 0.05 tonne of copper tubes and 30.89 tonnes of zinc strips during the first quarter of 1962. There is also an export promotion scheme covering non-ferrous semis, alloys and fully processed manufactures. Exporters of these items are given import entitlement for raw materials at specified percentages of the f.o.b. values of the exports. Full particulars of the export incentive scheme are given in Appendix IX.

10.2. It is observed that the extent of import entitlement for virgin copper in respect of exports of copper sheets, strips, plates, and circles is 85 per cent of the f.o.b. value of exports while in the case of copper semis like rods, sections, pipes, tubes, etc. the entitlement is lower, namely, 75 per cent of the f.o.b. value of exports. At the public inquiry manufacturers urged that extrusion being a more difficult process than rolling, the import entitlement for raw materials in the case of copper rods, sections, pipes, and tubes should be higher than for sheets and circles and should at least be equal to 85 per cent of the f.o.b. value of exports. The domestic market for these extruded products being so vast and expansive the indigenous manufacturers will have little incentive to export unless they are allowed to import larger quantities of copper and zinc and achieve economies of larger output. We suggest that Government should give their sympathetic consideration to the request of the industry.

11.1. *Import duty*.—Protected categories of non-ferrous semi-manufactures are assessed to import duty under items Nos. 64(3), 64(5), 67(2), 68(2), 68(4), 70A and 70(5) of the First Schedule to the Indian Tariff Act, 1934. Relevant extracts from that Schedule are reproduced below :—

Item No.	Name of Article	Nature of duty	Standard rate of duty	Preferential rate of duty if the article is the produce or manufacture of			Duration of protective rates of duty
				The U.K.	A British Colony	Burma	
1	2	3	4	5			6
64(3)	Copper rods other than electrolytic copper rods,						
	(a) of British manufacture.	Protective.	40 per cent <i>ad valorem</i> .	..	..	Free	December 31st, 1962.
	(b) not of British manufacture.	Do.	50 per cent <i>ad valorem</i> .	..	..	..	Ditto.



several units be drawn up and implemented for stepping up their production referred to in paragraph 6.2 and for improving the quality of their products.

8.2. *Standard specifications.*—The Indian Standards Institution has already published standards for copper rods, lead sheets, brass pipes and tubes for general purposes, solid drawn copper alloy tubes and naval brass rods and sections. Draft standards for copper pipes and tubes, zinc strips, copper alloy tubes for condensers in sea-going vessels, free cutting brass rods and sections and high tensile brass rods, bars and sections (revision of draft) are under circulation. No Indian standard has been issued or is under consideration for zinc sheets. Licences to use ISI certification marks have so far been granted to two manufacturers for copper rods only. A licence valid upto 31st March 1962 was issued to a manufacturer of brass tubes (general purposes) for using the certification mark. The manufacturer holding the licence has not, however, renewed it from April 1962.

9.1. A summary of the import control policy announced from time to time by Government since the licensing period October 1959—

March 1960 for the protected categories of non-ferrous semi-manufactures is given in Appendix VII. Lately, in view of the foreign exchange difficulties the Government of India have as a general policy imposed a cut of 50 per cent on established importers' quotas originally announced for the current licensing period April 1962—March 1963. Licences for actual users are also subject to a cut, the quantum being decided in each case on merits.

9.2. Imports of the several items of non-ferrous semi-manufactures under consideration during 1959, 1960, 1961 and 1962 (January—March) are given in the following table :—

Item	1959		1960		1961		1962 (Jan.-March)	
	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
	Tonnes	Lakh Rs.	Tonnes	Lakh Rs.	Tonne	Lakhs Rs.	Tonnes	Lakh Rs.
Copper rods (other than electrolytic rods)	6.65	0.37	32.08	2.39	17.04	1.02	28.07	1.01
Copper pipes and tubes	500.41	27.49	528.09	37.79	452.05	28.56	202.27	11.71
Lead sheets (other than sheets for teachests)	67.26	0.85	63.44	1.57	343.25	4.94	64.17	1.04
Zinc sheets and strips	128.57	2.61	712.03	14.01	218.20	4.51	7.11	0.14
Brass pipes and tubes	976.17	47.47	1175.47	75.82	1297.97	66.83	260.18	13.79
Brass rods	403.42	12.02	787.47	30.61	1387.87	37.29	130.06	4.04

Details of countrywise imports are given in Appendix VIII.

1	2	3	4	5	6
64(5)	Copper pipes and tubes*				
	(a) of British manufacture.	Protective.	30 per cent <i>ad valorem</i> .	.. ..	December 31st, 1962.
	(b) not of British manufacture.	Do.	40 per cent <i>ad valorem</i> .	.. ..	Ditto.
67(2)	Lead sheets other than sheets for teachests.	Protective.	25 per cent <i>ad valorem</i> .	.. ..	Free December 31st, 1962.
68(2)	Zinc sheets not otherwise specified†.	Protective.	25 per cent <i>ad valorem</i> .	.. ..	Free December 31st, 1962.
68(4)	Zinc strips†	Protective.	35 per cent <i>ad valorem</i> .	.. ..	December 31st, 1962.
70(A)	Brass pipes & tubes.	Protective.	35 per cent <i>ad valorem</i> .	.. ..	December 31st, 1962.
70(5)	Brass rods .	Protective.	40 per cent <i>ad valorem</i> .	.. ..	Free December 31st, 1962.

[\*This item (copper pipes and tubes) is also subject to a countervailing excise duty under I.C.T. item 64(6)(iii). The rate of such duty is 10 per cent *ad valorem*.

†These two items (zinc sheets and zinc strips) are also subject to a countervailing excise duty under I.C.T. item 68(5)(i). The rate of such duty is Rs. 300 per metric tonne.]

11.2. *Excise duty*.—Among the items under consideration (a) copper pipes and tubes and (b) zinc sheets and strips have been made subject to excise duty for the first time under Finance Act, 1961. The rates of duty are indicated below :—

Item No. of Central Excise Tariff	Description of goods	Rate of duty
Item 26A Sub-item (iii)	Copper pipes and tubes . . . .	10 per cent <i>ad valorem</i> .
Item 26B Sub-item (i)	Manufactures of zinc, the following, namely, plates, sheets, circles, strips and foils in any form or size.	Rs. 300 per metric tonne.

12.1. As stated in paragraph 3.2, one of our Cost Accounts Officers was deputed to examine the costs of production of semi-manufactures by National Pipes and Tubes Co. Ltd., Metals & Ores Co. and Standard Metal Works Private Ltd. The items costed and the periods investigated by him are stated below :—

Name of the factory	Products costed	Period investigated
National Pipes and Tubes Co. Ltd.	Brass rods of diameters $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{7}{8}$ ", $1\frac{1}{4}$ " and 2", Pure copper rods of diameters $\frac{1}{2}$ " and 1" and Pure copper tubes of sizes $\frac{3}{4}$ " $\times$ 16 swg. and $2\frac{1}{4}$ " $\times$ 10 swg.	1st October, 1960 to 30th September, 1961.
Metals & Ores Co.	Zinc strips for batteries and addressograph zinc sheets (cut to length).	26th December, 1960 to 25th December, 1961.
Standard Metal Works Private Ltd.	Lead sheets of 3; to 4' width.	1st November, 1959 to 31st October, 1960.

Production of arsenical copper rods, arsenical copper tubes and brass tubes by National Pipes and Tubes Co. Ltd. during the year investigated was so small that their costs were not determined. In the case of Metals and Ores Co. the cost of production for photo-engraver plates (which are manufactured by the company from May 1958) was determined upto mill finished stage for the year investigated. As regards highly polished plates, since production commenced only in February 1962, we have estimated the cost of their production for the future on the basis of estimates of polishing costs furnished by the company.

12.2. Among the three units, whose costs were examined by our Cost Accounts Officer, Metals and Ores Co., as stated earlier, has an acceptable system of cost accounting. No scientific system of costing has so far been introduced by National Pipes and Tubes Co. Ltd. The representative of the company explained that he had just been able to recruit a trained/cost accountant and hoped to be able to introduce a proper costing system shortly. The third unit, Standard Metal Works Private Ltd., does not even keep basic data in regard to direct items of expenditure for the various products manufactured by it. Its accounts are maintained in Gujarati and several assumptions had to be made in allocating the total expenditure among various cost heads.

12.3. On the basis of reports submitted by our Cost Accounts Officer relating to the actual costs of production during the periods investigated we have estimated the future costs of production at the factories of National Pipes and Tubes Co. Ltd. and Metals and Ores Co. Our estimates of future costs and future fair ex-works prices for the various products are given on page 32. We explain below briefly the factors that have been taken into account in framing the estimates.

12.3.1. *Production.*—Annual production has been assumed at 2,085 tonnes for copper and brass solids and 68 tonnes for copper and brass tubes and pipes in the case of National Pipes and Tubes Co. Ltd. As regards Metals and Ores Co., its annual production has been assumed at 4,400 tonnes of zinc strips for batteries, zinc strips for addressographs, photo-engraver plates, zinc callots for batteries and electrodes.

12.3.2. *Raw materials.*—Prices of raw materials are based on the latest quotations applicable to the several sources (direct import at L.M.E. prices, imports through established importers and D.L.F. imports) and also on the pattern of purchases which National Pipes and Tubes Co. Ltd. and Metals and Ores Co. may reasonably be expected to follow during the next three years.

12.3.3. *Conversion charges.*—Suitable adjustments have been made for both price and consumption factors in respect of stores items and electricity and for increased earnings in wages and salaries due to normal annual increments.

12.3.4. *Depreciation.*—Depreciation has been calculated at normal income-tax rates on the written down value of the assets.

12.3.5. *Return.*—Return has been allowed at 12 per cent on the employed capital, the element of working capital included therein being taken as equivalent to five months' cost of production.

12.4. No estimate of future costs could be prepared for Standard Metal Works Private Ltd., as it was unable to furnish any data regarding the availability of raw materials and estimates of future production. Being a small unit not registerable under the Industries (Development and Regulation) Act, 1951 the quota of lead metal is fixed by the State Director of Industries. This quota being very small, the company is dependent mainly on purchases from the open market. The representative of the unit stated that the supply position of lead metal has become very uncertain on account of the restrictive import policy and regretted his inability to forecast his future production.

*Statement showing Commissions estimates of costs of production and fair ex-works prices*

Name of the Company		National Pipes & Tubes Co. Ltd.						Metals & Ores Co.	
Product		Brass rods		Pure copper rods		Pure copper tubes		Zinc strips for batteries cut to length	Highly polished zinc sheets for photo-engraving 20" x 40" x 16 SWG (6.25 KGS.)
Size		1/2 dia.	3/4 dia.	7/8 dia.	1 1/2 dia.	2" dia.	1" dia.	3/4" x 16 2 1/2" x 10 SWG	
Raw materials cost		130.08	130.08	130.08	130.08	130.08	176.92	177.06	Rs. per kg. 1.19 1.18 11.31
Conversion charges including depreciation.		57.25	51.87	48.12	47.13	461.6	70.26	264.16	Rs. per piece 0.33 0.52 11.10
Packing		0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.05 0.05 0.45
Estimated cost of production		187.56	182.18	178.43	177.44	176.47	247.41	441.45	1.57 1.75 22.86
Return		17.27	12.25	11.83	11.73	11.63	20.43	36.26	0.16 0.22 3.90
Estimated fair ex-works price		204.83	194.43	190.26	189.17	188.10	267.84	477.71*	1.73* 1.97* 26.76*

[\*Exclusive of excise duty.]

12.5. While on the subject of costs we would like to mention that in the course of our investigation we have observed that the melting and irrecoverable losses in the cases of National Pipes and Tubes Co. Ltd., and Standard Metal Works Private Ltd., are very high. The cost of raw materials alone accounts for as much as about 70 per cent of the cost of production of most of the non-ferrous semi-manufactures under consideration. Having regard to the fact that the raw materials used by these concerns are all imported, every avoidable wastage which involves loss of our very limited foreign exchange should be eliminated. We impressed on the representatives of the companies the imperative need for reducing these losses. The handicaps of these units are that their furnaces are not up-to-date. We are advised that considerable economy on such recurring losses of metal can be achieved by National Pipes and Tubes Co. Ltd. if it is enabled to replace its present electric arc furnaces by low frequency induction furnaces to which a reference has been made in paragraph 8.1.

13. The data relating to c.i.f. prices and quotations received from principal importers, manufacturers, the Indian Embassy in Belgium and Collectors of Customs are tabulated in Appendix X. These were discussed at the public inquiry. We have decided to adopt the following c.i.f. prices/quotations for purposes of measuring the extent of disadvantage suffered by the indigenous products for which we have determined fair ex-works prices.

Sl. No.	Name of Product	C.i.f. price/quotations
		Rs.
1.	Brass rods— $\frac{1}{4}$ " dia.	Not available due to restriction on imports.
	Brass rods— $\frac{1}{4}$ " dia.	Ditto.
	Brass rods— $\frac{7}{8}$ " dia.	161.07 per 50 kg.
	Brass rods— $1\frac{1}{4}$ " dia.	161.15 per 50 kg.
	Brass rods—2" dia.	157.00 per 50 kg.
2.	Pure copper rods— $\frac{1}{4}$ " dia.	Not available due to restriction on imports.
	Pure copper rods— $1\frac{1}{4}$ " dia.	Ditto.
3.	Pure copper tubes— $\frac{1}{4}$ " $\times$ 16 SWG	Ditto.
	Pure copper tubes— $2\frac{1}{4}$ " $\times$ 10 SWG	282.50 per 50 kg.
4.	Zinc strips for batteries	1.76 per kg.
5.	Zinc sheets for addressograph	1.61 per kg.
6.	Zinc plates—highly polished (for making process blocks).	19.55* per plate of 20" $\times$ 40" $\times$ 16 SWG.

[\*C.i.f. price furnished by process makers at the public inquiry.]

14.1. The following statement gives a comparison of fair ex-works prices of indigenous copper tubes, zinc sheets, zinc strips and brass rods with the landed costs without duty of comparable imported products. As mentioned in paragraph 13, c.i.f. prices or quotations were not available for copper rods (other than electrolytic copper rods). We could not estimate the future fair ex-works prices for brass tubes and lead sheets.

Item		Pure copper tubes.	Zinc sheets	Zinc strips	Brass rods	
Specification		24" x 10 SWG	For addressograph - for photo-engraving	For batteries	7/8" dia.	2" dia.
Unit		per 50 kg.	per kg. of 20" x 40" x 16 SWG	per kg.	per 50 kg.	
		Rs.	Rs.	Rs.	Rs.	Rs.
1. C. i. f. price.	. . . . .	282.50	1.61	1.76	161.07	157.00
2. Clearing charges (1%)	. . . . .	2.83	0.02	0.02	1.61	1.57
3. Landed cost without duty	. . . . .	285.33	1.63	1.78	162.68	158.57
4. Fair ex-works price	. . . . .	419.36*	1.97*	1.73*	190.26	188.10
5. Disadvantage of (4) <i>vis-a-vis</i> (3) [4—3]	. . . . .	134.03	20.34	7.01 (—)	27.58	29.53
6. (5) as a percentage of (1)	. . . . .	47.4	21.1	35.9 (—)	17.1	18.8

[\*Exclusive of excise duty.]

Thus the disadvantages suffered by the several semi-manufactures covered by the present inquiry and the current rates of protective/revenue duty are as follows :—

Sl. No.	Name of the article	Quantum of disadvantages in terms of protective duty	Current rate of protective duty
1	Copper rods other than electrolytic copper rods.	Could not be calculated for lack of information about c.i.f. price.	40 per cent <i>ad valorem</i> in the case of rods of British manufacture and 50 per cent <i>ad valorem</i> in the case of rods not of British manufacture.
2	Copper pipes and tubes . . . .	47.4 per cent <i>ad valorem</i> .	30 per cent <i>ad valorem</i> in the case of pipes and tubes of British manufacture and 40 per cent <i>ad valorem</i> in the case of pipes and tubes not of British manufacture.
3	Lead sheets other than sheets for teachests.	Future fair ex-works price not estimated.	25 per cent <i>ad valorem</i> .
4	Zinc sheets not otherwise specified.	21.1 per cent <i>ad valorem</i> .	25 per cent <i>ad valorem</i> .
5	Highly polished zinc sheets specially prepared for making process blocks.	35.9 per cent <i>ad valorem</i> .	15 per cent <i>ad valorem</i> (Revenue duty).
6	Zinc strips . . . . .	(—)2.8 per cent <i>ad valorem</i> .	35 per cent <i>ad valorem</i> .
7	Brass pipes and tubes . . . .	Future fair ex-works price not estimated.	35 per cent <i>ad valorem</i> .
8	Brass rods . . . . .	Varies from 16.4 per cent to 18.8 per cent <i>ad valorem</i> .	40 per cent <i>ad valorem</i> .

It is observed that based on a bare comparison of costs, the prevailing rates of duty are adequate except in the case of two items, namely, (1) copper pipes and tubes and (2) highly polished zinc sheets specially prepared for making process blocks. For lack of data we could not calculate the quantum of disadvantage for copper rods, lead sheets and brass pipes and tubes.



14.2. We discuss below the question of continuance of tariff protection for the different products.

14.2.1. *Copper rods (other than electrolytic copper rods).*—As stated earlier we have not been able to obtain c.i.f. prices or quotations for copper rods. Rods can be manufactured by rolling or extrusion. We are here referring to copper rods and sections manufactured by extrusion process. Such rods have extensive industrial uses and the industry has to go in for large scale investments to produce the several sizes and types of rods and sections which are not at present manufactured in the country. Withdrawal of protection from this section of the industry at this stage would not, in our view, be appropriate. We recommend, therefore, that protection to extruded copper rods (other than electrolytic copper rods) should be continued at the existing rates of protective duty, namely, 40 per cent *ad valorem* (preferential) and 50 per cent *ad valorem* (standard). Extruded copper sections are at present covered by I.C.T. item No. 64 and assessed to a revenue duty of 40 per cent *ad valorem* (standard) and 30 per cent *ad valorem* (preferential). We recommend that this item should also be brought within the scheme of protection at the rate of duty mentioned above. As regards copper rods manufactured by rolling process which are mainly used for wire drawing, they do not require such skill and investment as extruded rods and we do not consider that protection to them is necessary any longer. We, therefore, recommend that protection may be discontinued in their case from 1st January 1963. Thereafter such rods may be allowed to be covered by I.C.T. item No. 64 or a new item may be introduced in the First Schedule to the Indian Tariff Act, 1934 and such rates of revenue duty (standard and preferential) as are considered appropriate by Government on revenue considerations may be fixed.

14.2.2. *Copper pipes and tubes.*—The rate of duty indicated for copper tubes for the size for which c.i.f. price was available is 47·4 per cent *ad valorem* (preferential). Given the equipments referred to earlier, with increased production and with better control of operations it should be possible for the industry to reduce its cost of production. We are, therefore, not in favour of increasing the existing rates of duty which are 30 per cent *ad valorem* (preferential) and 40 per cent *ad valorem* (standard). We recommend that the existing rates of protective duties should be continued on the expiry of the current period of protection.

14.2.3. *Lead sheets other than sheets for teachests.*—As started earlier, the cost of future production of this item could not be determined for lack of data. We recommended continuance of protection to this item on the last occasion because we felt that withdrawal of protection would operate as a disincentive to the investment of capital for the production of wider sheets used in chemical and other industries. Standard Metal Works Private Ltd. has procured a wider rolling mill for the manufacture of these sheets. Metallica Works Private Ltd. has, as stated earlier, plans to import the necessary equipment for the purpose. We are also advised that the process of manufacture is not difficult. In the circumstances we do not consider that protection to this item should be continued after the expiry of the current period of

protection. We recommend, therefore, that protection to lead sheets other than sheets for teachests be withdrawn with effect from 1st January 1963 and that from that date such rate of revenue duty as is considered appropriate by Government on considerations of revenue may be fixed.

14.2.4. *Zinc sheets and zinc strips.*—The protective duty indicated for zinc sheets is 21·1 per cent *ad valorem* while indigenous zinc strips enjoys an advantage over the imported products. None of the manufacturers appear to be interested in the manufacture of zinc sheets. As regards strips, Metals and Ores Co. is the sole producer. The considerations which weighed with us at the time of the last inquiry for continuing protection were that the industry was in the midst of an expansion scheme and would also have to establish manufacture of highly polished zinc sheets. These considerations do not prevail now. The expansion scheme has been implemented and Metals & Ores Co. has, as stated earlier, succeeded in producing highly polished zinc sheets of acceptable quality on a commercial scale. It is also observed that in the production pattern of the company there is a marked shift from zinc strips to other products which either are substitutes, such as callots instead of strips for batteries or require considerable further processing such as electrodes. In the circumstances protection to 'zinc sheets not otherwise specified' [I. C. T. item No. 68(2)] and 'zinc strips' [I. C. T. item No. 68(4)] is no longer necessary and we recommend that it may be discontinued from 1st January 1963. Thereafter such rates of revenue duty as are considered appropriate by Government may be levied.

14.2.5. *Highly polished zinc sheets for photo engraving.*—The level of duty indicated for these sheets is 35·9 per cent *ad valorem*, while they are present assessable to a revenue duty of 15 per cent *ad valorem* under I. C. T. item No. 72(2). The technique of manufacture including polishing is reported to be difficult and highly specialised and is at present limited to a few manufacturers in the world. Metals & Ores Co. has developed a process of its own and has still to go a long way to improve the quality of its product so as to give the required performance in photo-engraving. In the circumstances, we consider that protection should be granted to highly polished zinc sheets specially prepared for making process blocks and recommend that the rate of protective duty should be fixed at 35 per cent *ad valorem*. For this purpose a new item 68(2A) may be inserted in the First Schedule to the Indian Tariff Act, 1934 and all references to highly polished zinc sheets in I. C. T. item No. 72(2) should be deleted.

14.2.6. *Brass pipes and tubes.*—We have not estimated the future fair ex-works prices of brass pipes and tubes to assess the extent of disadvantage of this section of the indigenous industry. The considerations which have led us to recommend continuance of protection to extruded rods apply with greater force to this item. Brass pipes and tubes are more difficult to extrude and draw than copper pipes and tubes and we have yet to go a long way to master the technique and to attain self-sufficiency. We, therefore, recommend that protection be continued at the existing rate of duty of 35 per cent *ad valorem*.

14.2.7. *Brass rods*.—The rates of duty indicated for the three sizes for which we have made the comparison are 17.1 per cent, 16.4 per cent and 18.8 per cent. The average rate works out to 17.4 per cent. For the reasons explained in paragraph 14.2.1. with reference to extruded copper rods and sections we recommend that protection to extruded brass rods may be continued at the existing rate of duty, namely, 40 per cent *ad valorem*. Extruded brass sections which are at present assessed to a revenue duty of 35 per cent *ad valorem* under I. C. T. item No. 70 should also be included in the scheme of protection and subjected to a protective duty of 40 per cent *ad valorem*. As regards rolled brass rods, no protection is necessary and we recommend that it may be deprotected and may be allowed to be covered from 1st January 1963 by I.C.T. item No. 70 or a new item inserted in the First Schedule to the Indian Tariff Act, 1934 to take care of these rods and such rate of revenue duty as is considered appropriate by Government may be levied thereon.

14.3. *Period of protection*.—We recommend that continuance of tariff protection recommended in the foregoing paragraphs should be for a further period of three years from 1st January 1963.

14.4. *Modifications to I. C. T. Schedule*.—If our recommendations are accepted I. C. T. item Nos. 64(3), 64(5), 70(A) and 70(5) should be amended as indicated in the following table. Further, a new item 68(2A) should be introduced to cover highly polished zinc sheets specially prepared for making process blocks and item 72(2) modified so as to exclude such sheets.

Item No.	Name of the article	Nature of duty	Standard rate of duty	Preferential rate of duty if the article is the produce or manufacture of			Duration of protective rates of duty
				The U.K. A. British Burma Colony			
1	2	3	4	5	6	7	8
64(3)	Extruded copper rods and sections other than electrolytic copper rods,						
	(a) of British manufacture.	Protective.	40 per cent <i>ad valorem</i> .	..	..	Free	December 31st, 1965.
	(b) not of British manufacture.	Do.	50 per cent <i>ad valorem</i> .	..	..	..	Ditto.

1	2	3	4	5	6	7	8
64(5)	Copper pipes and tubes,						
	(a) of British manufacture.	Do.	30 per cent <i>ad valorem</i> .	..	..	..	Ditto.
	(b) not of British manufacture.	Do.	40 per cent <i>ad valorem</i> .	..	..	..	Ditto.
68(2A)	*Highly polished zinc sheets for making process blocks.	Do.	35 per cent <i>ad valorem</i> .	..	..	..	Ditto.
70(A)	Brass pipes and tubes.	Do.	35 per cent <i>ad valorem</i> .	..	..	..	Ditto.
70(5)	Extruded brass rods and sections.	Do.	40 per cent <i>ad valorem</i> .	..	..	Free	Ditto.

[\*New item to be introduced.]

15.1. Subsequent to the last inquiry there has been little change in the selling systems of Metals and Ores Co. and National Pipes and Tubes Co. Ltd. described in paragraphs 19.3 and 19.4 respectively in our 1959 report. Both Kamani Tubes Private Ltd. and Devidayal (Sales) Private Ltd. which commenced production after 1959 sell direct to consumers and have also appointed distributors and stockists at important centres to hold stocks for spot sales. They are allowed a discount on the selling price upto 5 per cent. Standard Metal Works Private Ltd. sells its products directly to consumers and dealers and has not appointed any agents or distributors in upcountry centres.

15.2. Consumers are generally satisfied with the selling systems. Their main complaints are about delayed deliveries of supplies of brass/copper rods and tubes and selling prices. The Ahmedabad Metal Merchants' Association has stated that though Gujarat is a very important consuming centre for these semis, none of the manufacturers has appointed distributors or stockists of their products in the State. The views generally expressed in written memoranda and oral evidence are that the selling prices of indigenous manufacturers for copper/brass rods and tubes are much higher than the landed costs with duty of corresponding imported products and that the prices charged by distributors or stockists are even higher than the prices quoted by the manufacturers. Printing houses and block makers have also represented that the selling prices of 'highly polished zinc sheets now manufactured by Metals & Ores Co. are excessively high as compared to the prices of imported sheets. The reasons why the current prices of Metals and Ores Co. are higher appear to be that it gets its sheets straightened by an outside

agency and that it has yet to stabilise its production technique. The company proposes to instal a straightening machine shortly and hopes to reduce its prices. Our fair ex-works price is based on the assumption that the straightening of sheets will be done inside the factory.

15.3. Appendix XI shows side by side selling prices of the manufacturers, prices prevailing in the market and those at which purchases have been made by certain consumers of the products which are covered by the inquiry. It is noticed that the complaints of high prices are not without basis. The manufacturers admitted that it was difficult for them to exercise control at the level of retail dealers as there is every temptation for these dealers to take undue advantage of scarcity and long delivery period. We have reminded the representatives of the industry of their special obligation to ensure that their selling prices should bear a fair relation to their costs and that their distributors and stockists should not exploit the consumers in a scarcity market. We have suggested that the units which sell a part of their products through distributors and stockists should compel the latter to display prominently at their premises the correct selling prices and also obtain from them periodical returns showing details of their sales.

16. Our conclusions and recommendations are summarised below :—

(i) Early steps should be taken by the Development Wing to assess the present installed capacity of Metals & Ores Co., Calcutta for manufacture of zinc sheets and strips and Metallica Works Private Ltd., Bombay for manufacture of lead sheets.

Summary of conclusions and recommendations.

[Paragraph 5.4]

(ii) The domestic demand in 1962 is estimated at 4,500 tonnes for copper/brass solids (rods and sections), 3,000 tonnes for copper/brass hollows (pipes and tubes), 1,500 tonnes for lead sheets other than sheets for teachests and 5,000 tonnes for zinc sheets and strips. The demand in 1965 for the above semi-manufactures will be of the order of 8,000, 7,000, 2,500 and 6,500 tonnes respectively.

[Paragraph 6.3]

(iii) As the products of the non-ferrous semi-manufactures industry find increasing use in the manufacture of industrial items requiring higher standard of quality, it is necessary to assist the industry in procuring equipments required for modernisation and testing. This matter should be considered by Government and a phased programme of imports of the more essential equipment required by the several units be drawn up and implemented for stepping up their production and for improving the quality of their products.

[Paragraph 8.1]

(iv) Protection to extruded copper rods other than electrolytic copper rods [I.C.T. item No. 64(3)] should be continued at the existing rates of protective duty, namely, 40 per cent *ad valorem* (preferential)

and 50 per cent *ad valorem* (standard). Extruded copper sections should also be brought within the scheme of protection at the same rates of duty.

[Paragraph 14.2.1]

(v) Protection to copper rods manufactured by rolling process, now covered by I.C.T. item No. 64(3), should be discontinued from 1st January 1963. Thereafter such rates of revenue duty (standard and preferential) as are considered appropriate by Government on revenue considerations may be fixed for these rods.

[Paragraph 14.2.1]

(vi) Protection to copper pipes and tubes [I.C.T. item No. 64(5)] should be continued on the expiry of the current period of protection at the existing rates of protective duty namely, 30 per cent *ad valorem* (preferential) and 40 per cent *ad valorem* (standard).

[Paragraph 14.2.2]

(vii) Protection to lead sheets other than sheets for teachests [I.C.T. item No. 67(2)] should be withdrawn with effect from 1st January 1963. From that date such rate of revenue duty as is considered appropriate by Government on considerations of revenue may be fixed.

[Paragraph 14.2.3]

(viii) Protection to zinc sheets not otherwise specified [I.C.T. item No. 68(2)] and zinc strips [I.C.T. item No. 68(4)] should be discontinued from 1st January 1963. Thereafter such rates of revenue duty as are considered appropriate by Government may be levied.

[Paragraph 14.2.4]

(ix) Protection should be granted to highly polished zinc sheets specially prepared for making process blocks and the rate of protective duty be fixed at 35 per cent *ad valorem*. A new item 68(2A) should be inserted in the First Schedule to the Indian Tariff Act, 1934 and all references to highly polished zinc sheets in I. C. T. item No. 72(2) should be deleted.

[Paragraph 14.2.5]

(x) Protection to brass pipes and tubes [I. C. T. item 70(A)] should be continued at the existing rate of duty of 35 per cent *ad valorem*.

[Paragraph 14.2.6]

(xi) Protection to extruded brass rods [I.C.T. item 70(5)] should be continued at the existing rate of duty, namely, 40 per cent *ad valorem*. Extruded brass sections should also be included in the scheme of protection and subjected to a protective duty of 40 per cent *ad valorem*.

[Paragraph 14.2.7]

(xii) Rolled brass rods, now covered by I.C.T. item 70(5), should be deprotected from 1st January 1963. Thereafter such rate of revenue duty as is considered appropriate by Government may be levied thereon.

[Paragraph 14.2.7]

(xiii) Continuance of tariff protection recommended by us should be for a further period of three years from 1st January 1963.

[Paragraph 14.3]

(xiv) If our recommendations are accepted, I.C.T. item Nos. 64(3), 64(5), 70(A) and 70(5) should be amended and a new item 68(2A) introduced as indicated in paragraph 14.4.

[Paragraph 14.4]

17. We wish to thank the manufacturers, importers and consumers who furnished us with valuable information in connection with this inquiry and whose representatives gave evidence before us.

**Acknowledgement**

K. R. P. AIYANGAR,  
*Chairman.*

J. N. DUTTA,  
*Member.*

J. N. SEN GUPTA,  
*Member.*

R. BALAKRISHNA,  
*Member.*

PRAMOD SINGH,  
*Secretary.*

BOMBAY;  
Dated the 24th July, 1962. } सत्यमेव जयते



## APPENDIX I

[Vide Paragraph 3.1]

*List of firms, Associations and Govt. departments to whom questionnaires/ letters were issued and from whom replies or memoranda were received*

\*Indicates those who replied in detail or submitted memoranda.

†Indicates those who stated they were either not dealing in the product or not interested in the inquiry.

### (A) PRODUCERS:

- \*1. National Pipes and Tubes Co. Ltd., Nicco House, 122, Hare Street, Calcutta-1.
- \*2. Jaipur Metals & Electricals Ltd., Jaipur, Rajasthan.
- \*3. Jayant Metal Manufacturing Co., 924-A, Sayani Road, Bombay-28.
- \*4. Metals & Ores Co., Division of Union Carbide India Ltd., 1 & 3, Brabourne Road, Calcutta-1.
- \*5. Hooseini Metal Rolling Mill Private Ltd., Atlas Mill Compound, Reay Road, Bombay-10.
- \*6. Standard Metal Works Private Ltd., 17, Tardeo Bridge, (Low level), Bombay-7.
- \*7. Devidayal (Sales) Private Ltd., 71, Kanjur Village Road, Devidayal Nagar, Bombay-78.
- \*8. Kamani Tubes Private Ltd., Agra Road, Kurla North, Bombay-70.
- \*9. Kamani Metals & Alloys Ltd., Kamani Chambers, Nicol Road, Ballard Estate, Fort, Bombay-1.
- †10. Devidayal Rolling & Refineries Pvt. Ltd., P. B. No. 6215, Gupta Mills Estate, Reay Road, Bombay-10.
- †11. Messrs Shri Mahesh Metal Works, Kishingarh (Rajasthan).
- †12. Lalubhai Amichand, 48-50, Kansara Chawl, Bombay-2.
- †13. Saru Smelting & Refining Coprn. Ltd., Near Cantt Rly. Station, Meerut.
- \*14. Leos Mercantile Corpn., 25, Bank Street, Fort, Bombay-1.

### (A-1) PROSPECTIVE PRODUCERS :

- \*1. Shri G. D. Binani, 38, Strand Road, Calcutta-1.
- \*2. Metal Corporation of India Ltd., 135, Canning Street, Calcutta-1.
- \*3. Metallica Works Private Ltd., 79/83, Dr. Annie Besant Road, Bombay-18.

### (B) IMPORTERS :

- \*1. Imperial Chemical Industries (India) Pvt. Ltd., I.C.I. House, 34, Chowringhee, Calcutta-1.
- \*2. Binani Commercial Co. Private Ltd., 28/30, Anantwadi, Bombay-2.
- \*3. Muni & Co., General Assurance Building, 232, Dr. D. Naorojee Road, Fort, Bombay-1.
- †4. Dineshchandra Keshavlal & Co., 209, Kika Street, Bombay-2.
- †5. Bombay Hardware Co., 85, Kika Street, Bombay-4.



6. India Metal Agencies, India House, G.P.O., Bombay-1.
7. Choonilal Mohanlal & Co., 54, Kika Street, Bombay-4.
- \*8. Mehta Nathmal Viraji & Sons, 49, Gulal Wadi, Kika Street, Bombay-4.
- \*9. Sepulchre Bros. (India) Ltd., 210, D. Naorojee Road, Bombay-1.
- \*10. Abdul Kader & Sons, 7, Angappa Naick Street, Post Box No. 229, Madras-1.
- \*11. Metal Distributors Private Ltd., 12/18, Vithalbhai Patel Raod, Bombay-4.
12. British Metal Corporation (India) Private Ltd., Streeloreto House, D. Vachha Road, Bombay-1.

(C) CONSUMERS :

1. C. S. Pochee & Sons, 586, Chira Bazar, Girgaum Road, Bombay-2.
2. Hindusthan Motors Ltd., 8, India Exchange Place, Calcutta-1.
3. Ashok-Leyland Ltd., Bank of Mysore Buildings, N.S.C. Bose Road, Madras-1.
- \*4. Standard Motor Products of India Ltd., 29, Mount Road, Madras-2.
- \*5. Automobile Products of India Ltd., Agra Road, Bhandup, Bombay-40.
- \*6. Tata Locomotive & Engineering Co. Ltd., Bombay House, 24, Bruce Street, Fort, Bombay-1.
- \*7. Simpson & Co. Ltd., 202/203, Mount Road, Madras-2.
- \*8. Gurunanak Electro Mechanical Works, Phagwara.
- \*9. Estrela Batteries Ltd., Post Box No. 6602, Bombay.
- \*10. J. B. Advani Oerlikon Electrodes (P) Ltd., 6, Rampart Row, Bombay-1.
11. Radio & Electricals Mfr. Co. Ltd., Mysore Road, Bangalore.
- \*12. Premier Automobiles Ltd., Construction House, Ballard Estate, Bombay-1.
- \*13. Racek Industries (P) Ltd., 12-A, Agra Road, Bombay-79.
14. Senior Store Keeper, Mazagaon Docks Ltd., Bombay.
- \*15. Burmah-Shell Oil Storage & Distributing Co. of India Ltd., Burmah-Shell House, Ballard Estate, Bombay-1.
16. Crompton Parkinson (Works) Pvt. Ltd., P. O. Box No. 5663, Haines Road, Worli, Bombay-18.
17. Mysore Electrical Industries Ltd., Okleypuram, Post Box No. 561, Bangalore-21.
18. English Electric Co. of India Pvt. Ltd., P. B. No. 2392, Pallavaram, Madras-27.
19. T.I. Cycles of India Ltd., Ambattur, Madras.
- \*20. Motor Industries Co. Ltd., Bangalore.
21. Maharashtra Sugar Mills Ltd., Industrial Assurance Building, Churchgate, Bombay-1.
- \*22. Man Industrial Corporation Ltd., Post Box No. 131, Jaipur.
- \*23. Philips India Ltd., Poona.
24. General Electric Co. of India Pvt. Ltd., Magnet House, 6, Chittaranjan Avenue, Calcutta-13.
- \*25. Associated Electrical Industries Mfg. Co. Pvt. Ltd., 'Crown House, 13, Rajendra Nath Mukherjee Road, Calcutta-1.
- \*26. India Electric Works Ltd., Diamond Harbour Road, Calcutta-34.
- \*27. British India Electric Construction Co. Ltd., 6, Mayur Bhanj Road, Calcutta-23.
- \*28. Southern Screws Pvt. Ltd., 7, L. G. Nagar Road, Madras-2.

29. Hindustan General Electric Corpn. Ltd., Thapar House, 25, Brabourne Road, Calcutta-1.
30. Aluminium Corpn. of India Ltd., 7, Council House Street, Calcutta-16.
- †31. Indian Aluminium Co. Ltd., 31, Chowringhee Road, Calcutta-16.
- †32. Gestetner Duplicators Private Ltd., 9-A, Esplanade East, Calcutta-1.
33. Saxley & Farmer (India) Pvt. Ltd., 17, Convent Road, Entally, Calcutta-14.
- \*34. Port Engineering Works Ltd., 8, Clive Row, Calcutta-1.
- \*35. Calcutta Tramways Co. Ltd., P. 4, Mission Row Extension, Calcutta-1.
- \*36. Tata Iron & Steel Co. Ltd., Jamshedpur.
- \*37. Tata Chemicals Ltd., Bombay House, 24, Bruce Street, Bombay-1.
38. Shaw Wallace & Co. Ltd., Wallace House, 4, Bankshall Street, Calcutta-1.
- \*39. Indian Iron & Steel Co. Ltd., 12, Mission Row, Calcutta-1.
- †40. National Insulated Cable Co. of India Ltd., Stephen House, 4, Dalhousie Square East, Calcutta-1.
- †41. British Insulated Cables Ltd., 9, Hare Street, Calcutta-1.
- \*42. Alkali & Chemical Corpn. of India Ltd., 34, Chowringhee Road, Calcutta-16.
43. Sen-Raleigh Industries of India Ltd., Mercantile Buildings, Calcutta-1.
- \*44. Oriental Metal Pressing Works (P) Ltd., Post Box No. 6556, 131, Worli, Bombay-18.
45. Relifan Private Ltd., Agra Road, Mulund, Bombay-80.
- \*46. Perfect Valves & Machine Tools Corpn. 29-B, Ali Chambers, Dean Lane, Fort, Bombay-1.
47. Hyderabad Allwyn Metals Works Ltd., Sanatnagar P. O., Hyderabad-18.
- †48. Godrej & Boyce Mfg. Co. Pvt. Ltd., Lal Baug, Parel, Bombay-12.
- \*49. Bajaj Electricals Ltd., 15-17, Victoria Road, Mazgaon, Bombay-10.
- \*50. The Precision Engineers, A-3, Industrial Estate, Rajajinagar, Bangalore-10.
51. Andhra Scientific Co. Ltd., 4, Blackers Road, Mount Road, Madras.
- \*52. National Fasteners Pvt. Ltd., 'B' Super, Industrial Estate, Guindy, Madras-32.
- \*53. Vanaz Engineering Pvt. Ltd., 396, Cadell Road, Prabhadevi, Bombay-28.
- \*54. Auto Accessories (India) Pvt. Ltd., Forbes Building, Home Street, Bombay-1.
55. E. D. Neroy & Co., 534, Sandhurst Bridge, Bombay-7.
56. Commercial Art Engravers (Pvt.) Ltd., 4th Floor, Saraswati Mandir, (Tutorial School Building), Kennedy Bridge, Grant Road, Bombay-7.
- \*57. Sun Process Works, 8, Swadeshi Mills Compound, Tata Road, Off. Road, Bombay-4.
58. Express Block & Engraving Studios Pvt. Ltd., Mustafa Building, Sir Pherozeshah Mehta Road, Bombay-1.
59. Bradme of India Private Ltd., Lakshmi Building, Sir Pherozeshah Mehta Road, Bombay-1.
- \*60. Hutti Gold Mines Co. Ltd., Hutti P. O., Via Raichur—Deccan.
61. Century Rayon, 159, Churchgate Reclamation, Industry House, Bombay-1.
- \*62. The Baroda Rayon Corpn. Ltd., 130-132, Apollo Street, Bombay-1.
63. H. Dawoodbhai & Co., 41, Kolsa Mohalla, Bombay-3.

- †64. Ashok Metal Industries, Sewri Cross Road, Bombay.
- 65. The National Rayon Corpn. Ltd., Ewart House, Bruce Street, Bombay-1.
- 66. Atlas Metal Trading Co., 47, Kolsa Mohalla, Bombay-3.
- †67. Dharamsi Morarji Chemical Co. Ltd., Prospect Chambers, 317-21, Dr. Dadabhoy Naoroji Road, Bombay-1.
- 68. The Indian Alum. Mfg. Co. Ltd., 305, Kalbadevi Road, Bombay.
- †69. The Indian Rayon Corpn. Ltd., United Bank of India Building, S. P. Mehta Road, Bombay-1.
- 70. Jatin Traders India, Tardeo, Sonawala Estate, Bombay.
- 71. Govindram Murlidhar, 54, Latoucha, Lucknow.
- †72. S. Suresh & Co., Lohar Chawl, Keranwala Building, Bombay-2.
- †73. Kanayalal Navnitlal. Parikh, Kansara Dehla, Ahmedabad.
- \*74. South India Viscose Ltd., Shanmuga Manra, Race Course, Coimbatore.
- 75. Kasajang Products, Kurla, Andheri, Bombay.
- \*76. Devidayal Cable Industries Pvt. Ltd., Reay Road, Darukhana, Bombay.
- 77. Tambawala Products Agencies Pvt. Ltd., 13, Singanna Naick Street, Madras-1.
- 78. Larsen & Toubro Ltd., I.C. House, Ballard Estate, Bombay-1.
- \*79. R. Somasundram, 221, Vadgadi, Bombay-3.
- †80. O.M.S.S. Sangaralinga Naidu, 276, Bhat Bazar, Bombay.
- 81. Hindustan Lever Ltd., Scindia House, Ballard Estate, Bombay-1.
- 82. Dhanra' Mill Pvt. Ltd., Sun Mill Road, Lower Parel, Bombay.
- 83. Chandulal Narayandas, 96, Gulalwadi, Bombay.
- 84. Abdul Kader & Sons, Angappa Naick Street, Madras.
- †85. Lallubhai Amichand, 48-50, Kansara Chawl, Bombay-3.
- 86. B. J. Taraporewala & Co., 384, Dabholkerwadi, Kalbadevi, Bombay.
- 87. Atlas Cycle Industries Ltd., Sonepat (near Delhi).
- †88. Indian Hardware Industries Ltd., New Town Ship, Faridabad.
- 89. Gour Chemicals, Agra Road, Bombay.
- 90. A. K. Abdullahhai & Co., 319, Linghi Chetty Street, Madras-1.
- 91. Dayalal Virchand, 38, Kolsa Mohalla, Bombay.
- 92. Eastern Chemical Industries, C-E-I, Harinagar, New Delhi.
- 93. V. G. Lele, 169, Vincent Road, Dadar, Bombay.
- †94. C. M. Shah, 9-A, Tamarind House, Fort, Bombay.
- 95. Kaizer & Co., 79, Mohamedally Road, Bombay.
- \*96. Teksan Pvt. Ltd., Modi Chambers, Bombay-4.
- 97. Bhogilal Jamnadas, 63, Tamba Kanta, Sutar Bazar, Bombay.
- 98. Bombay Hardware Co., 85, Kika Street, Gulalwadi, Bombay-4.
- †99. The Indian Link Chain Manufacturers Ltd., Agra Road, Bombay-78.
- \*100. Coimbatore Machinery & Metal Mart, 12-2A, Frazer Square, Coimbatore.
- 101. East India Engg. Corpn., 98, Banazhaber Road, Kanpur.
- 102. Tekano Chemical Industries Ltd., P. B. 74, Calicut.
- 103. A. Natverlal, 72-80, Nagdevi Cross Lane, Bombay.
- 104. Blue Star Industries Pvt. Ltd., Lalunigam Road, Colaba, Bombay-5.
- \*105. D.C.M. Chemical Works, Post Office Box 1211, Najafgar Road, Delhi. 15.
- 106. Haribhai Lalji & Co., Sontakunji, Bombay.

107. M. R. Nathumal Jain, Jain Bazar, Jammu Kashmir.
108. K. K. Shah & Bros., Telgali, Shiyaganj, Indore.
- \*109. Textile Aniline Chemical Co. Pvt. Ltd., Pratapnagar, Baroda-4.
110. Delhi Cloth Mills, Bara Hindu Roa, Delhi.
111. Tanki & Co., 22, Kishna Park, Khanpur, Ahmedabad.
112. Overseas Traders, Vir Nariman Road, Yusuf Building, Bombay.
- \*113. Tirpur Hardware & Machinery Mart, Paladam Road, Tirupur.
114. A. Ahmedally & Co. Pvt. Ltd., 14-17, Shree Narsi Maharaja Road, Bangalore.
115. A. S. Hasanally, Kolsa Mohalla, Bombay.
116. Bharat Corporation, Jogidas Vithaldas Street, Raopur, Baroda.
117. Ratanji Bhagwanji & Co., 3760, Chawri Bazar, Delhi.
118. Central India Machinery Mfg. Co. Ltd., Birlanagar (M.P.).
119. Chotalal & Bros., 138, Nagdevi Street, Bombay.
- \*120. Gwalior Rayon Silk Mfg. (Wvg.) Co. Ltd., Birlagram, Nagda (M.P.).
- †121. Bajaj Auto Ltd., 134, Dr. Annie Basent Road, Worli, Bombay-18.
- †122. Flashlight India (Pvt.) Ltd., 135, Princept Street, Calcutta-13.
- \*123. J. K. Business Machines Ltd., 2, Mangoe Lane, Calcutta-1.
124. Pranab Industries, Bipin Behari Ganguli Street, Calcutta-12.
125. New Associated Commercial Enterprises (P) Ltd., 127-129, Modi Street, Ahmed Building, Bombay-1.
126. Printers House Private Ltd., 10, Scindia House, Post Box 273, New Delhi-1.
127. Chimanlal Desai Ltd., Gool Mansion, Homji Street, Fort, Bombay-1.
128. Raka Trading Co., 5054, Sirki Walan, Delhi-6.
129. H. Chandamall & Co., 57, Nyniappa Naick Street, Madras.
- †130. Mahindra & Mahindra Ltd., Gateway Building, Apollo Bunder, Bombay-1.
131. Arun Metal Industries Pvt. Ltd., 23, Convent Road, Calcutta.
132. Ashok Mfg. Co. Pvt. Ltd., 37, Panchkuin Road, Post Box No. 305, New Delhi.
133. The Korsons Manufacturing Co. of India (P) Ltd., Agra Road, Bhandup, Bombay-78.

**(D) GOVERNMENT CONSUMERS :**

- \*1. The Controller of Stores, Southern Railway, Perambur, Madras.
- \*2. The Controller of Stores, Northern Eastern Railway, Gorakhpur.
- \*3. The Controller of Stores, Western Railway, Headquarter Office, Churchgate, Bombay-1.
- \*4. The Controller of Stores, Central Railway, New Administrative Building, Bombay-1.
5. The Controller of Stores, Eastern Railway, Calcutta.
- \*6. The Controller of Stores, Northern Railway, Headquarters Office, Baroda House, New Delhi.
7. The Controller of Stores, South Eastern Railway, Garden Reach, Calcutta-23.
- \*8. General Manager, Integral Coach Factory, Perambur, Madras.

- \*9. General Manager, B.E.S.T. Undertaking, Electric House, Colaba, Bombay.
- \*10. The Mint Master, The India Government Mint, Fort, Bombay-1.
- \*11. The Chief Controller of Printing & Stationery, Government of India Printing & Stationery Department, New Delhi.
- \*12. Hindustan Machine Tools Ltd., Jalahalli P. O., Bangalore.
- 13. Hindustan Aircraft Ltd., Hindustan Aircraft Post, Bangalore.
- \*14. The General Manager, Indian Telephone Industries Ltd., Durvaninagar P.O., Bangalore.
- \*15. The Director General, Ordnance Factories, 6, Esplanade East, Calcutta.
- \*16. The Director General of Supplies & Disposals, National Insurance Building, Parliament Street, New Delhi.
- \*17. Bharat Electronics Ltd., Jallahalli P. O., Bangalore-13.
- 18. Hindusthan Shipyard Ltd., Gandhigram, Visakhapatnam, Andhra.
- \*19. Indian Airlines Corporation, Banerjee Building, 21-B, Asaf Ali Road, New Delhi.
- 20. Mysore Implements Factory, Post Box No. 4, Hassan.
- \*21. Commissioner for the Port of Calcutta, Calcutta.
- \*22. Controller of Stores, Bombay Port Trust, Bombay-10.
- 23. Hindusthan Steel Ltd., Bihar Secretariat Bldg., P. O. Hinno, Ranchi (Bihar State).
- 24. Government Electric Factory, Bangalore.
- 25. Government Precision Factory, Lucknow.
- 26. Dy. Controller of Stores, Chittaranjan Loco Works, Chittaranjan.
- 27. National Instruments Factory, Jadavpur, Calcutta.
- 28. India Security Press, Nasik Road,
- \*29. Heavy Electricals (India) Ltd., Bhopal.
- 30. Naval Stores Officer, Naval Stores Depot., Kurla, Bombay-70.

**(E) MANUFACTURERS' ASSOCIATIONS & OTHERS :**

- \*1. The Secretary, Indian Non-Ferrous Metals Manufacturers' Association, India Exchange, India Exchange Place, Calcutta-1.
- \*2. Ahmedabad Metal Merchants' Association, Railwaypura, Kansara Dehl Ahmedabad-2.
- 3. The Bombay Metal Exchange Ltd., Gogate Mansion, Kika Street, Bombay-2.
- 4. The Federation of Non-Ferrous Metals Importers (India), 32, Second Bhoi wada, Bombay-2.
- 5. All India Non-Ferrous Metal Industries' Association, Liberty Building, Marine Lines, Bombay-1.
- 6. The Small-Scale Copperware Manufacturers' Association, 39, Bhajipala Lane, Bombay-3.
- \*7. The Maharashtra State Process Engravers' Association, Lucky Mansion, 3-d Floor, 79, Ghogha Street, Fort, Bombay-1.

**(F) RAW MATERIALS SUPPLIERS :**

- \*1. Metal Corporation of India Ltd., 135, Canning Street, Calcutta-1.
- \*2. Indian Copper Corporation Ltd., P.B. No. 174, Calcutta.

**(G) GOVERNMENT DEPARTMENTS :**

- \*1. Sr. Industrial Adviser (Engineering), Ministry of Commerce & Industry, Development Wing, Metal Directorate (Metal Section), Udyog Bhavan, Maulana Azad Road, New Delhi.
- \*2. The Director, Indian Standards Institution, Manak Bhavan, 9, Mathura Road, New Delhi.
- \*3. The Director, The Geological Survey of India, 27, Chowringhee, Calcutta.
- \*4. The Director, Indian Bureau of Mines, Ministry of Steel, Mines & Fuels, Government of India, Nagpur.
- \*5. The First Secretary (Commercial) to the Embassy of India in Belgium, 585, Avenue Louise, Brussels, Belgium.
- 6. Counsellor (Commercial) to the High Commission of India in the U. K., India House, Aldwych, London W. C. 2.
- 7. The First Secretary (Commercial) to the (Embassy of India in Germany, 262, Koblenz Strasse, Bonn (West Germany).
- \*8. Collector of Customs, Bombay.
- \*9. Collector of Customs, Madras.
- \*10. Collector of Customs, Calcutta.
- \*11. Collector of Customs, Cochin.
- \*12. The Development Commissioner, Small Scale Industries, Ministry of Commerce & Industry, Udyog Bhavan, New Delhi.
- \*13. The State Trading Corporation of India Ltd., Post Box No. 79, New Delhi.
- 14. The Director of Industries, Maharashtra State Bombay.
- 15. The Director of Industries, West Bengal State, Calcutta.

**(H) CHIEF SECRETARIES OF STATES :**

- 1. The Chief Secretary to the Government of Andhra Pradesh, HYDERABAD.
- 2. The Chief Secretary to the Government of Assam, SHILLONG.
- 3. The Chief Secretary to the Government of Bihar, PATNA.
- 4. The Chief Secretary to the Government of Gujarat, AHMEDABAD.
- 5. The Chief Secretary to the Government of Jammu and Kashmir, SRI-NAGAR.
- †6. The Chief Secretary to the Government of Kerala, TRIVANDRUM.
- †7. The Chief Secretary to the Government of Madhya Pradesh, BHOPAL.
- \*8. The Chief Secretary to the Government of Madras, MADRAS.
- 9. The Chief Secretary to the Government of Mysore, BANGALORE.
- 10. The Chief Secretary to the Government of Orissa, BHUBANESHWAR.
- 11. The Chief Secretary to the Government of Punjab, CHANDIGARH.
- 12. The Chief Secretary to the Government of Rajasthan, JAIPUR.
- 13. The Chief Secretary to the Government of Uttar Pradesh, LUCKNOW.
- 14. The Chief Commissioner, Delhi Administration, DELHI.
- 15. The Chief Commissioner, Himachal Pradesh, SIMLA.

## APPENDIX II

[Vide Paragraph 3.2]

### *List of Factories visited by the Commission and its Officers*

Name of factory/unit visited	By whom visited	Date of visit
1	2	3
Metal Corporation of India Ltd., Zawar Mines, Udaipur.	Dr. R. Balakrishna, Member	21-10-1961.
Metals & Ores Co., Calcutta	Shri J. N. Dutta, Member	15-3-1962.
National Pipes & Tubes Co. Ltd., Calcutta.	Ditto.	16-3-1962.
Jaipur Metals & Electricals Ltd., Jaipur.	Ditto.	27-4-1962.
Metals & Ores Co., Calcutta.	Shri J. N. Sen Gupta, Member	1-6-1962.
National Pipes & Tubes Co. Ltd., Calcutta.	Ditto.	5-6-1962.
Devidayal (Sales) Private Ltd., Bombay.	Shri K. R. P. Aiyangar, Chairman Shri J. N. Dutta, Member. Shri J. N. Sen Gupta, Member Dr. R. Balakrishna, Member.	18-6-1962.
Kamani Tubes Private Ltd., Bombay.		
Standard Metal Works Private Ltd., Bombay.		
Indian Copper Corporation Ltd., Ghatsila.		
Metals & Ores Co., Calcutta.	Shri Hari Bhushan, Technical Director	21-4-1962.
National Pipes & Tubes Co. Ltd., Calcutta.	Ditto.	23-4-1962.
Kamani Tubes Private Ltd., Bombay.	Ditto. (Engineering & Metallurgy).	24-4-1962.
Devidayal (Sales) Private Ltd., Bombay.	Ditto.	8-6-1962
Standard Metal Works Private Ltd., Bombay.		
National Pipes & Tubes Co. Ltd., Calcutta.	Shri S.R. Mallya, Assistant Cost Accounts Officer.	28th March 1962 to 13th April, 1962.
Metals & Ores Co., Calcutta		
Standard Metal Works Private Ltd., Bombay.	Ditto.	April to May, 1962.

## APPENDIX III

[Vide Paragraph 3.2]

### *List of Persons who attended the Commission's Public Inquiry*

#### (A) PRODUCERS :

- |  |   |   |              |   |
|--|---|---|--------------|---|
| 1. Shri C. S. Dutt   | . | . | Representing | National Pipes & Tubes Co. Ltd., Nicco House, 1 & 2, Hare Street, Calcutta-1.               |
| 2. Shri C. K. Kamani   |   |   |              |   |
| 3. Shri D. K. Bhatt.   |   |   |              |   |
|  | } |   | ,,           | Kamani Metals & Alloys Ltd., Kamani Chambers, Nicol Road, Ballard Estate, Fort, Bombay-6.   |
| Shri D. K. Bhatt also represented Jaipur Metals & Electricals Ltd., Jaipur, Rajasthan. |   |   |              |   |
| 4. Shri H. R. Kamani   |   |   |              |   |
| 5. Shri P. C. N. Mazumdar  |   |   |              |   |
|  | } |   | ,,           | Kamani Tubes Private Ltd., Agra Road, Kurla North, Bombay-70.                               |
| 6. Dr. D. P. Antia   |   |   |              |   |
| 7. Dr. H. C. Bijwat  |   |   |              |   |
| 8. Shri P. C. Banerjee   |   |   |              |   |
|  | } |   | ,,           | Metals & Ores Co., Division of Union Carbide India Ltd., 1 & 3, Brabourne Road, Calcutta-1. |
| 9. Shri A. G. Tambawala  |   |   |              |   |
| 10. Shri Vasant J. Dalal   |   |   |              |   |
| 11. Shri J. J. Gandhi  |   |   |              |   |
|  | } |   | ,,           | Hooseini Metal Rolling Mill Private Ltd., Atlas Mills Compound, Reay Road, Bombay-10.       |
| 12. Shri Amirchand T. Gupta  |   |   |              |   |
| 13. Shri T. V. Rathnam.  |   |   |              |   |
|  | } |   | ,,           | Devidayal (Sales) Pvt. Ltd. 71, Kanjur Village Road, Devidayal Nagar, Bombay-78.            |
| 14. Shri R. N. Doshi   |   |   |              |   |
|  |   |   | ,,           | Standard Metal Works Private Ltd., 17, Tardeo Bridge, Bombay-7.                             |
| 15. Shri G.D. Binani   |   |   |              |   |
| 16. Shri R. K. Bagri   |   |   |              |   |
|  | } |   | ,,           | G. D. Binani & Co., 38, Strand Road, Calcutta-1.  |

#### (B) MANUFACTURERS' ASSOCIATION & OTHERS :

- |                      |   |   |              |  |
|----------------------|---|---|--------------|--|
| 17. Shri J. V. Doshi | . | . | Representing | Indian Non-Ferrous Metals Manufacturers' Association, India Exchange, Indian Exchange Place, Calcutta-1. |
| 18. Shri G. J. Shah  |   |   |              |  |
|                      |   |   | ,,           | Bombay Metal Exchange Ltd., Gogate Mansion, Kika Street Bombay-2.  |



19. Shri P. N. Indurkar . . Representing Maharashtra State Process Engravers' Association, 3rd Floor, 79, Ghoga St., Fort, Bombay-1.

## (C) IMPORTERS :

20. Shri E. I. Sequeira . . Representing Imperial Chemical Industries (India) Private Ltd., I. C. I. House, 34, Chowringhee, Calcutta-1.
21. Shri R. L. Muni . . , Muni & Co., General Assurance Building, 232, Dr. D. Naoroji Road, Fort, Bombay-1.
22. Shri S. R. Daga . . , Metal Distributors Private Ltd., 12/18, Vithalbhai Patel Road, Bombay-4.
23. Shri L. S. Kothari . . , British Metal Corpn. (India) Private Ltd., Steelcrete House, D. Vachha Road, Bombay-1.

## (D) CONSUMERS :

24. Shri C. S. Harihar . . Representing Estrela Batteries Ltd., Post Box No. 6602, Bombay.
25. Shri R. W. Wad } , Oriental Metal Pressing Works (P) Ltd., Post Box 6556, 131, Worli, Bombay-18.
26. Shri J. E. Yorke } ,
27. Shri G. M. Mehta . . , Sun Process Works, 8, Swadeshi Mills Compound, Tata Road, Off Charni Road, Bombay-4.
28. Shri P. C. Gopal . . सत्यमेव जयते Vakil & Sons Private Ltd., Narandas Bldg., Ballard Estate, Bombay-1.
29. Shri Syed Mohammed . . , Express Block & Engraving Studio Ltd., Mustafa Building, P. M. Road, Bombay-1.
30. Shri F. R. Poonawala . . , Commercial Art Engraver Private Ltd., Sarswati Mandir, Kennedy Bridge, Bombay-7.
31. Shri J. M. Pinto . . , The Times of India Printing Press, D. Naoroji Road, Bombay.
32. Shri Tarachand } , Indian Cotton Mills Federation, Elphinstone Building, Veer Nariman Road, Bombay-1.
33. Shri C. V. Radhakishan } ,
34. Shri D. G. Kanetkar . . , All India Federation of Master Printers, 42, Broadway Madras-1.

**(E) GOVERNMENT CONSUMERS :**

35. Shri S. E. Ferriera . . . Representing Controller of Stores, Western Railway, Headquarters Office, Churchgate, Bombay-1.
36. Shri V. M. Mahadevan . . . ,, Controller of Stores, Central Rly., New Administrative Building, Bombay-1 and Intergral Coach Factory, Perambur, Madras.
37. Shri C. Parsuraman . . . ,, The Director General of Supplies & Disposals, National Insurance Building, Parliament Street, New Delhi.

**(F) RAW MATERIALS SUPPLIERS :**

38. Shri S. J. Dholakia . . . Representing Metal Corpn. of India Ltd., 135, Canning Street, Calcutta-1.
39. Shri D. R. P. Dryer }  
40. Shri K. H. Mohite } ,, Indian Copper Corporation Ltd., Post Box No. 174, Calcutta.

**(G) GOVERNMENT DEPARTMENTS :**

41. Shri C. J. Shah, Development Officer, (Metals) Representing Development Wing, Ministry of Commerce and Industry, New Delhi.
42. Shri A. B. Rao, Assistant Director (In-charge, Bombay Office). ,, Indian Standards Institution, New Delhi.
43. Shri Y. K. M. Nadaria, Appraiser. ,, Collector of Customs, Bombay.
44. Shri S. N. Sapre, Regional Manager. ,, State Trading Corpn. of India Ltd., New Delhi.
45. Shri P. A. Subnis, Dy. Director of Industries. ,, Director of Industries, Government of Maharashtra, Bombay.

**(H) OBSERVER :**

46. Shri K. A. S. Rao. . . Representing "Topicals", 6, Modi-Kunj, Brahminwada Road, Bombay-19.

# APPENDIX IV

[Vide Paragraph 5.3]

Statement showing production of non-ferrous semi-manufactures during 1959-1960, 1961 and 1962 (January-April)  
(in Tonnes)

Name of manufacturer	Copper solids (rods & other sections) other than electrolytic				Brass solids (rods & other sections)				Copper hollows				Brass hollows				Lead sheets other than sheets for teabests.				(a) Zinc sheets (b) Zinc strips			
	Jan.- April, 1960	1961	1962	Jan.- April, 1962	1959	1960	1961	1962	1959	1960	1961	1962	1959	1960	1961	1962	1959	1960	1961	1962	1959	1960	1961	1962
1. National Pipes & Tubes Co. Ltd., Calcutta.	59	98	140	25.04	1597	1825	1694	639.16	49	63	60	15.06	9	3	2	1.98	49	43	22	5.43	14	8	2	3.40
2. Kamani Tubes Private Ltd., Bombay.	..	..	..	..	..	79	480	258.46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3. Hoosaini Metal Rolling Mill Private Ltd., Bombay.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	243	212	458	127.64	..	..	..	..
4. Metal & Ores Co., Calcutta.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,788	3258	3830	1065.44
5. Jaipur Metals & Electrochemicals Ltd., Jaipur.	97	60	52	16.96	144	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6. Devidayal (Sales) Private Ltd., Bombay.	..	..	..	..	..	..	..	..	..	139	266	50.23	..	..	103	29.24	..	..	..	..	..	..	..	..
7. Standard Metal Works (Private) Ltd., Bombay.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	468	560	623	116.99	..	..	..	..
TOTAL	156	158	192	42.00	1741	1904	2174	897.62	49	202	326	65.31	9	3	105	31.22	768	815	1103	250.06	14	8	2	3.40
																					(a) 2788	(a) 3258	(a) 3830	(a) 1065.44
																					(b) 3258	(b) 3830	(b) 1065.44	(b) 3.40

## APPENDIX V

[Vide Paragraph 6.1]

Statement showing the data regarding estimates of current and future demand received from the different sources  
(In Tonnes)

Source of information	Current Demand (1962)					Future Demand			
	Brass /cop- per rods extruded	Brass /cop- per pipes & tubes extruded	Lead sheets	Zinc sheets strips		Brass/Cop- per rods extruded	Brass/cop- per pipes & tubes extruded	Lead sheets	Zinc sheets/ strips
1	2	3	4	5		6	7	8	9
Development Wing	4,000	3,000	1,200/1,500	4,000		8/10,000 (1964)	6/7,000 (1964)	2/2,200 (1964)	6,000 (1964)
National Pipes & Tubes Co. Ltd., Calcutta.	Brass bars 3,000 Copper bars 1,000	Brass tubes 750 Copper tubes 750	..	..		Brass bars 4,000 Copper bars 2,000 (1965)	Brass tubs 1,500 Copper tubes 1,500 (1965)	..	..
Kamani Tubes Private Ltd., Bombay.	4,400	2,700	..	..		5,500 (1965)	3,600 (1965)	..	..
Hooseini Metal Rolling Mill Private Ltd., Bombay.	..	..	2,000 (for chemi- cally pure and 6% antimo- nial lead sheet).	..		..	..	5,000 (1965) (for che- mically pure and 6% anti- monial lead sheet).	..

1	2	3	4	5	6	7	8	9
Metals & Ores Co., Calcutta.	..	..	..	5,000 (All rolled products of zinc).	..	..	..	6,100 (1965)
		Addressograph strips		175				250
		Battery strips		1,294				212
		Battery callots		2,557				4,141
		Duplex Electrodes		299				347
		Photoengravers Plates		550				850
		Misc. Eng. uses		125				300
				5,000				6,100
I.C.I. (India) Pvt. Calcutta.	Brass rods 3,500	Copper tubes 1,000 Brass tubes 1,700		..	Brass rods 5,000 (1965)	Copper tubes 1,800 Brass tubes 2,500 (1965)	..	..
G. D. Binani & Co., Calcutta.	4,000	4,000	..	..	6,000 (1965-66)	8,000 (1965-66)	..	..
Devidayal (Sales) Pvt. Bombay.	..	3,500	..	..	..	5,500 (1965)	..	..

## APPENDIX VI

[Vide Paragraph 7.5.2]

Statement showing imports of copper, zinc, brass and lead during 1959, 1960, 1961 and 1962 (January—March)

Name of the Metal		1959		1960		1961		1962 (January-March)	
		Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
1		2	3	4	5	6	7	8	9
<i>Copper</i>									
Copper unwrought ingots billets etc. . .		16,697	512.07	27,281	910.38	25,492	762.66	6,830	220.96
Copper scrap including ashes and dross . .		3,080	93.64	3,601	114.78	2,679	77.64	263	8.36
Copper wire bars electrolytic . . .		29,383	953.46	30,483	1045.91	32,007	1011.86	9,660	312.26
Copper wire bars excluding telegraph wire		203	7.26	77	2.63	131	4.16	361	11.39
TOTAL		49,563	1,566.43	61,442	2,073.70	60,309	1856.32	17,114	552.97
<i>Zinc</i>									
Zinc or spelter ingots cakes etc. . .		47,674	512.98	64,322	822.50	72,785	811.75	8,532	89.64
Zinc scrap including ashes and dross . . .		5	0.06	48	0.59	82	0.99	..	..
TOTAL		47,679	513.04	64,370	823.09	72,867	812.74	8,532	89.64

	1	2	3	4	5	6	7	8	9
<i>Brass</i>									
Brass etc. 55 to 74 PC CU 26 to 42 PC ZN .		0.25	0.01	29	1.00	10	0.39	..	..
Brass etc. CUZN in other proportion .		0.20	0.02	8	0.18	..	..	..	..
Brass bronze similar alloys scrap .		52.70	1.28	2,790	86.39	2,574	62.77	20	0.50
TOTAL . . .		53.15	1.31	2,827	87.57	2,584	63.16	20	0.50
<i>Lead</i>									
Pig lead . . . . .		22,609	224.09	23,385	237.93	22,162	200.25	7,476	62.67
Unwrought lead NES . . . . .		794	7.92	1,203	12.12	2,204	20.32	1,105	9.42
Antimonial lead . . . . .		653	6.98	232	2.73	318	3.33	154	1.51
Lead scrap . . . . .		3	0.04	..	0.01	15	0.32	..	..
Lead ores & concentrates . . . . .		7	2.18	77	1.43	75	1.24	34	0.54
TOTAL . . . . .		24,066	241.21	24,897	254.22	24,774	225.46	8,769	74.14

## APPENDIX VII

### [Vide Paragraph 9.1]

#### *Summary of the import control policy for non-ferrous Semi-manufactures since the licensing period October, 1959—March, 1960.*

##### (1) *Copper rods*

##### (2) *Copper pipes and tubes*

These fall under S. No. 41(II)/I of I.T.C. Schedule under the major group copper wrought.

During October, 1959—March, 1960 the quota allowed for established importers for semi-manufactures of copper was 12½% but the licences were not valid for rods. Actual users' applications from Textile Machinery Manufacturers for tubes were to be considered by the J.C.C.I.&E., Bombay on the recommendation of the Textile Commissioner. The same policy was continued for the subsequent licensing period April—September, 1960. During the period October, 60—March, 1961 the imports were banned. During April—September, 1961 the quota allowed was 12½%. Actual users' licences issued for semi-manufactures of copper brass, bronze and similar copper base alloys during October, 60—March, 1961 period where sufficient validity period was available for effecting imports, was on application also allowed to be converted into constituent non-ferrous metals, such as copper, zinc, tin, lead, etc. Particulars of items of semi-manufactures for which A.U. licences were obtained and the constituent non-ferrous metals for which A.U. licences were desired to be utilised, were to be furnished along with the applications. Applications for conversion of A.U. licences on the above basis into constituent metals were to be submitted to C.C.I., New Delhi, through the sponsoring authorities. The quota for established importers was reduced to 10% during October, 1961—March, 1962 and the quota licences were valid only for import of copper unwrought falling under S. No. 47/I. Actual users' licences issued for semi-manufactures were allowed to be converted for constituent non-ferrous metals on similar lines as mentioned above. During the current licensing period April, 62—March, 63 the quota allowed for S. No. 41(ii)/I is 10% and it is valid for import of copper unwrought falling under S. No. 47/I. The established importers of this item are allowed to import upto Rs. 2,000 worth of copper unwrought S. No. 47/I against their quota licenses issued for this S. No. for conversion by indigenous manufacturers into pipes, tubes and wrought. Conversion of non-ferrous metals into pipes, tubes and rods can be arranged by established importers through indigenous fabricators of pipes, tubes, wrought etc. nominated by the Development Wing (Development Officer—Metals). The balance value of imports of copper unwrought S. No. 47/I made against quota licences for this S. No. are to be placed at the disposal of the Controller of Non-ferrous Metals for sale/distribution. It is thus seen there has been more or less a ban on imports of copper rods.

##### (3) *Lead Sheets (S. No. 43/I of I.T.C. Schedule)*

Imports of lead sheets have been banned during all the licensing periods.

##### (4) *Zinc sheet (S. No. 44/I of I.T.C. Schedule)*

There was a quota of 15% for established importers during October, 1959—March, 1960. 7½% of the face value of quota licences could be utilised for zinc sheets. Actual users' applications from Scheduled Industries and from units borne



on the books of the Iron and Steel Controller, Calcutta were to be considered *ad hoc* by C.C.I. on the recommendation of the Development Wing. Zinc Sheets were also imported by S.T.C. for distribution among small scale units. During April, 60—March, 61 the quota was raised to 30% for established importers. As in the previous period,  $7\frac{1}{2}$ % of the face value of the licences could be utilised for import of zinc sheets. The provision for Actual users remained same. Application from Printing Industry for import of highly polished zinc sheets were considered by C.C.I. on *ad hoc* basis. This policy was continued during the next two periods (April—September, '61 and October, '61—March, '62) except that for the latter period there was a modification that small scale units were not permitted to make purchases from the stocks imported by established importers. During the current licensing period the same quota of 30% has been allowed to established importers. Zinc sheets are allowed to be imported upto  $7\frac{1}{2}$ % of the face value of a quota licence. Applications from Scheduled Industries borne on the books of the Development Wing and from units on the books of Iron and Steel Controller are to be considered *ad hoc* by C.C.I. Applications from printing Industry for import of highly polished zinc sheets are to be considered by the licensing authorities at ports.

(5) *Zinc Strips* (S. No. 44/I)

There was a quota of 15% for established importers during licensing period October, 1959—March, 1960. Provision also existed for scheduled industries. The policy remained same for the period April—September, 1960 but the quota was raised to 30%. This item was licensed on annual basis and therefore the above policy remained in force upto March, 1961. This policy continued to remain in force upto March, 1962. During the current licensing period *i.e.* April, 1962—March, 63, the same quota of 30% has been allowed to the established importers with a proviso that the quota would be utilised for import of zinc in the form of ingots, cakes, tile and slab. The Applications from Scheduled Industries borne on the books of the Development Wing and from Units on the books of the Iron and Steel Controller are to be considered *ad hoc* by the C.C.I., New Delhi.

(6) *Brass pipes*

(7) *Brass rods*

These fall under the general item 46(c)/I of I.T.C. Schedule for brass manufactures. There was a quota of 15% for established importers during the licensing period October, '59—March, 1960. Actual users' applications for brass tubes and rods were to be considered *ad hoc*. During April—September, 1960 there was same quota of 15% for established importers, but the licences were valid only for rolled drawn extruded phosphor bronze rods. Actual users' provisions existed for brass tubes on *ad hoc* basis and actual users' applications from the Sugar Industry for import of Brass Tubes were to be considered by D.C.C.I.&E. (CLA), New Delhi, on an *ad hoc* basis in consultation with the Ministry of Food & Agriculture (Directorate of Sugar & Vanaspati). During October, 60—March, 1961 imports were banned. During April—September, 1961 a quota of  $12\frac{1}{4}$ % was provided for established importers. A.U. applications were considered by C.C.I.&E., New Delhi for imports of brass tubes and rods on production of evidence to show that these items could not be manufactured indigenously. A.U. applications from the Sugar Industry for import of Brass Tubes were to be considered by the D.C.C.I. &E., (CLA), New Delhi, on merits and production of evidence to show that this item could not be manufactured indigenously. During October, 1961—March, 1962 the quota allowed for this item was  $12\frac{1}{4}$ %. Quota licences were valid for import of copper unwrought falling under S. No. 47/I and Zinc or Spelter unwrought in the form of ingots, cake and tile falling under S. No. 44/I in the ratio of 60% copper unwrought and 40% zinc or spelter unwrought in the form of ingots, cake and tile. Actual users' applications were to be considered by the Port Authorities for import of brass tubes and brass rods on production of evidence to show that these were not manufactured indigenously and also from Sugar Industry by D.C. (CLA) on same the basis. During the current licensing period (April, 1962—March, 1963) the quota allowed for this item is  $12\frac{1}{4}$ % and the quota licences are valid only for import of copper unwrought and zinc unwrought. Established importers of this

S. No. are allowed to import upto Rs. 2,000 worth of copper unwrought (S. No. 47/I) and zinc or spelter unwrought in the form of ingots, cake and tile (S. No. 44/I) in the ratio of 60% copper unwrought and 40% zinc or spelter unwrought in the form of ingots, cake and tiles against their quota licences issued for this S. No. for conversion by indigenous manufacturers into pipes, tubes and rods. Conversion of non-ferrous metal into pipes, tubes and rods can be arranged by established importers through indigenous fabricators of pipes, tubes, rods etc. nominated by the Development Wing, the balance value of imports of copper unwrought (S. No. 47/I) and zinc or spelter unwrought in the form of ingots, cake and tile, made against quota licences for this S. No. is to be placed at the disposal of the Controller of Non-ferrous Metals for sale/distribution in terms of the condition mentioned against this S. No. Actual users' applications from Sugar Industry for import of brass tubes will be considered by the D.C.C.I. (CLA), New Delhi on production of evidence to show that this item cannot be manufactured indigenously. Actual users' applications are to be considered by the Port Authorities for import of Brass rods, strips and tubes on production of evidence to show that these items cannot be manufactured indigenously.



## APPENDIX VIII

[Vide Paragraph 9.2]

*Statement showing imports of non-ferrous semi-manufactures during 1959, 1960, 1961 and 1962 (January—March)*  
(Quantity in Tonnes and Value in Rupees)

Sl. No.	Articles and countries from which imported	1959		1960		1961		1962 (January-March)	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1	2	3	4	5	6	7	8	9	10
1	<i>Copper rods other than electrolytic rods—</i>								
	U.K.	6.55	34,724	32.08	2,39,418	16.79	99,620	1.25	9,922
	Germany West	0.05	346	..	..	..	..	..	..
	U.S.A.	0.05	1,647	..	..	..	..	1.39	9,600
	Canada	..	..	..	..	..	..	25.39	81,515
	SM VAL TRNS.	..	..	..	..	0.25	1,910	0.04	218
	TOTAL	6.65	36,717	32.08	2,39,418	17.04	1,01,530	28.07	1,01,255
2	<i>Copper pipes &amp; tubes—</i>								
	U.K.	194.83	11,42,420	147.18	11,63,174	170.62	11,19,440	119.79	6,15,667
	Norway	0.05	700	0.20	1,522	..	..	..	..
	Germany West	46.18	2,95,682	113.11	8,22,651	101.94	6,56,458	19.53	1,08,940
	Netherlands	2.08	11,546	0.30	1,743	0.31	2,015	1.76	14,070

Belgium . . . . .	39-68	1,75,682	11-94	79,291	2-55	20,396	..	..
France . . . . .	23-62	1,18,691	1-87	16,361	..	..	..	..
Switzerland . . . . .	1-32	6,108	..	..	..	..	..	..
Italy . . . . .	32-72	1,56,441	43-55	2,55,650	17-52	99,015	32-44	2,50,529
Australia . . . . .	3-51	16,883	4-94	39,385	8-43	44,679	..	..
Czechoslovakia . . . . .	N.A.	321	0-06	35,035	..	..	..	..
Yugoslavia . . . . .	38-20	1,77,052	11-56	86,035	10-67	40,471	..	..
Japan . . . . .	41-25	2,12,317	38-70	2,57,608	38-20	1,94,506	3-82	15,752
Canada . . . . .	10-52	64,523	10-56	64,805	9-85	50,626	6-81	39,294
U.S.A. . . . .	12-75	1,29,529	42-68	3,87,759	58-10	4,14,006	7-33	78,316
Australia . . . . .	53-70	2,40,740	97-72	5,39,196	12-98	75,235	..	..
Hungary . . . . .	..	..	0-69	5,434	..	..	..	..
U.S.S.R. . . . .	..	..	0-26	2,500	..	..	..	..
Sweden . . . . .	..	..	2-77	21,045	2-99	22,514	8-82	31,307
Rumania . . . . .	..	..	..	..	5-83	32,515	..	..
SM VAL TRNS. . . . .	..	..	..	..	9-76	70,628	1-97	16,795
China . . . . .	..	..	..	..	2-30	13,856	..	..
TOTAL . . . . .	500-41	27,48,635	528-09	37,79,194	452-05	28,56,360	202-27	11,70,670

1	2	3	4	5	6	7	8	9	10	
3 Lead sheets other than sheets for teacheists—										
U.K.	.	.	67.26	85,131	18.42	97,639	237.37	3,43,481	60.38	93,473
Germany West	.	.	..	14	10.14	13,257	104.83	1,49,294	3.54	9,906
Netherlands	.	.	..	..	34.88	46,299	..	..	..	..
SM VAL TRNS.	.	.	..	..	..	..	1.05	1,044	0.25	279
TOTAL		.	67.26	85,145	63.44	1,57,195	343.25	4,93,819	64.17	1,03,658
4 Zinc sheets and strips—										
U.K.	.	.	0.25	989	112.91	1,48,817	7.16	22,318	..	..
Sweden	.	.	1.17	1,550	..	..	..	..	..	..
Poland	.	.	13.77	22,548	..	..	..	..	..	..
Germany West	.	.	46.52	94,558	106.10	2,44,043	29.52	64,878	..	..
Netherlands	.	.	4.83	7,907	9.38	17,822	..	..	..	..
Belgium	.	.	62.03	1,33,078	230.30	6,46,263	174.22	3,46,861	0.22	1,056
Singapore	.	.	..	..	30.62	63,908	..	..	..	..
U.S.A.	.	.	..	..	59.19	73,554	1.50	1,795	..	..
Australia	.	.	..	..	163.53	2,06,792	..	..	3.76	3,795
France	.	.	..	..	..	..	0.32	1,000	..	..
Japan	.	.	..	..	..	..	..	..	2.65	6,618
SM VAL TRNS.	.	.	..	..	..	..	5.48	13,884	0.48	2,574
TOTAL		.	128.57	2,60,630	712.03	14,01,199	218.20	4,50,736	7.11	14,043

5 Brass pipes & tubes—

U.K.	.	.	.	.	.	380-10	20,59,246	484-63	31,73,315	497-54	26,20,525	140-93	7,68,413
Sweden	.	.	.	.	.	2-03	14,097	2-93	23,474	8-21	46,883	5-79	34,538
Germany West	.	.	.	.	.	222-16	12,03,370	374-79	25,70,095	381-51	21,13,039	61-34	3,37,548
Belgium	.	.	.	.	.	1-22	6,039	2-05	11,434	0-56	2,696	..	..
Switzerland	.	.	.	.	.	0-20	1,200	2-87	17,445	4-51	25,475	..	..
Italy	.	.	.	.	.	160-89	7,23,182	234-05	12,69,867	224-82	10,37,008	49-75	2,26,478
Yugoslavia	.	.	.	.	.	125-38	4,91,605	58-49	4,46,237	91-75	3,92,196	..	..
Bahrain IS	.	.	.	.	.	16-21	39,959	..	..	..	..	..	..
Japan	.	.	.	.	.	21-90	1,01,989	3-09	13,820	59-42	3,08,539	..	..
Mozambique	.	.	.	.	.	4-52	10,506	..	..	..	..	..	..
U.S.A.	.	.	.	.	.	23-78	52,817	10-95	33,348	11-48	29,054	..	..
Fr. W. Indies	.	.	.	.	.	17-78	43,079	..	..	..	..	..	..
Netherlands	.	.	.	.	.	..	..	0-43	4,267	..	..	1-36	6,577
Austria	.	.	.	.	.	..	..	1-19	18,517	0-50	3,611	..	..
Australia	.	.	.	.	.	..	..	..	..	6-52	40,438	..	..
SM VAL TRNS.	.	.	.	.	.	..	..	..	..	10-15	54,945	1-01	5,870
Rumania	.	.	.	.	.	..	..	..	..	1-00	8,636	..	..
<hr/>													
TOTAL	.	.	.	.	.	976-17	47,47,089	1175-47	75,81,819	1,297-97	66,83,045	260-18	13,79,424

1	2	3	4	5	6	7	8	9	10	
6	Brass rods—									
	U.K.	.	43.89	1,62,214	208.75	9,49,153	204.64	6,47,893	12.21	40,809
	Germany West	.	44.76	1,36,504	110.94	4,06,969	40.49	1,42,768	6.79	24,793
	Netherlands	.	214.89	6,16,850	310.46	11,47,349	289.42	9,26,008	24.53	81,462
	Switzerland	.	15.60	47,286	4.91	57,025	27.39	96,225	..	..
	Yugoslavia	.	55.78	1,47,349	33.15	1,39,220	259.57	7,58,912	86.06	2,52,982
	Canada	.	8.13	29,101	0.15	1,034	0.31	1,500	..	..
	U.S.A.	.	7.16	29,726	..	..	0.57	3,500	..	..
	New Zealand	.	13.21	33,263	51.87	1,41,616	..	..	..	..
	Australia	.	..	..	5.17	16,516	8.02	30,452	..	..
	Italy	.	..	..	6.04	19,571	5.30	18,084	..	..
	Austria	.	..	..	8.40	25,342	12.97	40,122	..	..
	Japan	.	..	..	14.70	41,966	485.07	8,73,297	..	..
	Sweden	.	..	..	10.65	39,098	26.00	99,142	..	..
	SM VAL TRNS.	.	..	..	..	..	6.12	21,098	0.47	3,097
	Belgium	.	..	..	10.37	37,708	22.00	70,644	..	..
	Swaziland	.	..	..	0.01	1,810	..	..	..	..
	Denmark	.	..	..	11.90	36,902	..	..	..	..
TOTAL		.	403.42	12,02,293	787.47	30,61,279	1,387.87	37,29,645	130.06	4,03,143

## APPENDIX IX

[Vide Paragraph 10.1]

### *Particulars of the export incentive scheme covering non-ferrous articles.*

**(a) Scope**

The scheme covered the exports of non-ferrous semis (like sheets, strips, plates, rods, extruded sections, wire etc.) alloys (like hard alloys of copper base and soft alloys of tin, lead, antimony etc.) and fully processed manufactures (like utensils, sheets and wire metal products, electrical copper cables, valves, bile cocks, stop cocks, etc.).

**(b) Import entitlement**

Licences could be issued against exports under this scheme, according to the following scales of entitlement:—

Export item	Import entitlement
1	2
1. Copper sheets, strips, plates and circles.	85% of the f.o.b. value of exports, for import of virgin copper.
2. Copper semis, other than sheets, strips, plates and circles <i>i.e.</i> rods, sections, pipes, tubes, wires, including pure electrical copper wire.	75% of f.o.b. value of export for import of virgin copper including electrolytic copper wire bars in the case of electrical copper wire.
3. Brass sheets, circles and strips	85% of the f.o.b. value of exports for import of virgin copper, copper scrap, virgin zinc, zinc scrap or brass scrap. The entire entitlement can be used for import of brass scrap. Otherwise the import entitlement is to be used: <ul style="list-style-type: none"> <li>(a) Not exceeding 70% by weight for copper, virgin or scrap, and</li> <li>(b) Not exceeding 40% by weight for zinc, virgin or scrap.</li> </ul>
4. Brass semis other than sheets and strips ( <i>i.e.</i> rods, pipes, tubes, wire etc.).	75% of the f.o.b. value of exports for import of virgin copper, copper scrap, virgin zinc, zinc scrap or brass scrap. The entire entitlement can be used for import of brass scrap. Otherwise the import entitlement is to be used: <ul style="list-style-type: none"> <li>(a) Not exceeding 70% by weight for copper, virgin or scrap, and</li> <li>(b) Not exceeding 40% by weight for zinc, virgin or scrap.</li> </ul>




1	2
5. Fully processed manufactures of copper other than handicrafts (e.g. utensils, insulated electrical copper wires, cables, sheet and wire products etc.).	57% of f.o.b. value of exports for import of scrap or virgin copper including electrolytic copper wire bars in the case of export of insulated electrical copper wires and cables.
6. Fully processed manufactures of brass other than handicrafts (e.g. utensils, sheets and wire products, builders hardware, lid cocks, stop cocks etc.).	57% of f.o.b. value of exports for import of scrap or virgin copper, zinc or brass. The entire import entitlement can be used for import of brass or its scrap. Otherwise the import entitlement is to be used: (a) Not exceeding 70% by weight for virgin copper or copper scrap. (b) Not exceeding 40% by weight for virgin zinc or zinc scrap.
7. Fully processed manufactures of bronze or gun-metal (valves, hardware etc.).	57% of the f.o.b. value of exports for import of scrap or virgin copper, tin or bronze (gun-metal). The entire import entitlement can be used for import of bronze (gun-metal) or its scrap. Otherwise, the entitlement is to be used: (a) 90% by weight copper or copper scrap. (b) 10% by weight tin or tin scrap.
8. Copper based hard alloys, wrought or unwrought.	85% of the f.o.b. value of exports which may be used for : (a) Not exceeding 90% by weight for virgin copper or scrap. (b) Not exceeding 30% by weight for virgin tin or scrap.
9. Soft alloys of tin, lead and anti-mony, wrought or unwrought (including solders, type metal, etc.).	85% of the f.o.b. value of exports which may be used for import of virgin tin or lead in any proportions.

## APPENDIX X

[Vide Paragraph 13]

Statement showing the c. i. f. prices/quotations and landed costs

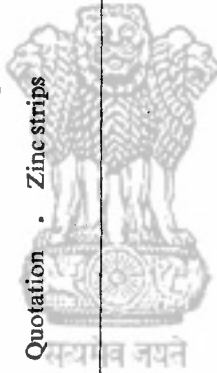
Sl. No.	Source of Information	Origin of import	Date of import	Type and specification	c.i.f. price Rs. per kg.	Customs duty Rs. per kg.	Clearing charges Rs. per kg.	Landed cost Rs. per kg.
1	2	3	4	5	6	7	8	9
1	Collector of Customs, Calcutta.	U. K. .	Oct. 1961	Brass rods of 1½" dia	161.15 (per 50 kg.)	64.50 (per 50 kg.)	10.00 (per 50 kg.)	262.65 (per 50 kg.)
2	Imperial Chemical Industries (India) Private Ltd., Calcutta.	U.K. .	4-9-1961	Brass rods of 1" dia Brass rods of 2" dia Brass rods of 1½" dia	3.13 3.14 3.14	1.25 1.26 1.26	0.02 0.02 0.02	4.40 4.42 4.42
3	D. J. Fowler Ltd., London (through National Pipes & Tubes Co. Ltd., Calcutta.)	U.K. .	Quotation	Brass rods of basis sizes 7/8" to 2½"	3.22 161.07 (per 50 kg.)	64.43 (per 50 kg.)	..	225.50 (per 50 kg.)
<i>Copper Tubes</i>								
1	Collector of Customs, Bombay.	W. Germany	24-3-1962	Coppertubing OD-ID of 1) .125" × 0.055" and 2) .083" × 0.031"	15.68	7.89	0.27	23.84
2	Collector of Customs, Madras.	U.K. .	Oct 1961	Pure copper tubes of 1" × 10 SWG.	7.00	2.80	0.20	10.00

1	2	3	4	5	6	7	8	9				
3	D. J. Fowler Ltd., London (through National Pipes & Tubes Co. Ltd., Calcutta).	U. K. . .	Quotation .	Pure copper tubes—Basis sizes—1" to 2" and 10 SWG.	282.50 (per 50 kg.)	113.00 (per 50 kg.)	..	395.50 (per 50 kg.)				
4	Devidayal (Sales) Pvt. Limited, Bombay.	U. K. . .	Quotation .	Copper tubes .	6.50	..	..	..				
1	Collector of Customs, Bombay.	W. Germany	22-3-1962	<div><div><p>सत्यमेव जयते</p></div><div><p><i>Brass Tubes</i></p><p>M. S. 58 U with 1.5 pb. free turning and screwing quality in lengths of 8-10 feet (16 gauge):</p><p>1) 997 kgs. of 1.240" × 1.014 id + 0.006"—0 &amp;</p><p>2) 836 kgs. of M. S. 60 with 1.2 pb-hard in lengths of 8-10' o. d. 1.237"/1.243" × 1.137"/1.143"</p></div></div>					4.39	1.98	0.03	6.40
2	D. J. Fowler Ltd., London (through National Pipes & Tubes Co. Ltd., Calcutta).	U. K. . .	Quotation .	Brass tubes—basis sizes—1" × 2½" × 10 SWG—70/80.	..	..	..	7.18				
3	Devidayal (Sales) Pvt. Limited, Bombay.	U. K. . .	Quotation .	Brass tubes .	5.75	..	..	..				

4	Collector of Customs, Calcutta.	U. K.	Sept. 1960	Brass tubes and pipes of $2'' \times 17/8''$ .	5.63	2.37	0.32	8.32
5	Collector of Customs, Madras.	Italy	19-1-1962	$1\frac{3}{8}'' \times 10$ SWG (Seamless solid drawn Alloy Tubes).	4.46	2.01	0.09	5.56
		U. K.	10-3-1962	$1\frac{1}{2}'' \times 16$ SWG (Sewa brand Seamless pipes & tubes).	4.88	2.19	0.10	7.17
		U. K.	12-2-1962	$1\frac{3}{8}'' \times 16$ SWG (Sewa brand Seamless tubes).	4.90	2.21	0.10	7.20
		Italy	19-1-1962	$2'' \times 16$ SWG (Seamless solid drawn Alloy Tubes).	4.50	2.03	0.10	6.62
6	Imperial Chemical Industries (India) Pvt. Ltd., Calcutta.	U. K.	11-5-1961	70/30 Alloy with ends annealed for expansion into tubes plates $13'' - 0\frac{1}{2}''$ long $1\frac{1}{8}''$ od $\times 16$ SWG.	5.00	2.25	0.02	7.27
		U. K.	Do.	2 od $\times 16$ SWG Solid drawn (Seamless) Brass Tubes to M.S. 1757B 70/30 Alloy drawn general purpose/temper in lengths of 16-18 ft.	4.98	2.24	0.02	7.24
		U. K.	21-7-1961	$2\frac{1}{2}''$ od $\times 16$ SWG	5.55	2.50	0.02	8.07
<i>Brass Pipes</i>								
1	Collector of Customs, Bombay.	W. Germany	22-3-1962	(1) 20 pieces of $15/8'' \times 1\frac{1}{2}''$ (2) 20 pieces of $1\frac{3}{8}'' \times 1\frac{1}{2}''$ & (3) 84 pieces of $1\frac{1}{2}'' \times \frac{1}{2}''$ } Some items are covered under Brass Tubes.	4.79	2.23	0.15	7.17

1	2	3	4	5	6	7	8	9
<i>Lead Sheets</i>								
1	Collector of Customs, Calcutta.	Germany	Feb. 1962	8' x 4' x $\frac{1}{4}$ " thick	2.51	0.63	0.13	3.27
2	Vieille-Montagne, Liege (through Indian Embassy, Belgium).	Belgium	Quotation	First melting, purity about 99.97%—sizes 30' x 3' x $\frac{1}{4}$ " & 30' x 3' x $\frac{3}{16}$ ".	1.08	..	..	..
<i>Zinc Sheets</i>								
1	Collector of Customs, Calcutta.	U. K.	Dec. 1961	(i) 8' x 4' x 155 mm } Indus- (ii) 8' x 3' x 155 mm } trial.	1.64	0.41	0.10	3.05
2	Collector of Customs, Madras.	Belgium	Sept. 1961	8' x 4' x 15 SWG (8' x 4'—98% purity).	1.95	0.79	0.06	2.80
		Belgium	Oct. 1961	8' x 3' x 15 SWG (8' x 3'—98% purity).	1.93	0.78	0.06	2.78
3	The Binani Commercial Co. Pvt. Ltd., Bombay.	U. K.	6-3-1961	Highly polished zinc sheets 20' x 40' x 1.5 G.	3.24	0.79	0.04	4.07
		W. Germany	10-3-1961	15 $\frac{1}{2}$ x 39 x 16 G	2.73	0.71	0.13	3.57
		U. K.	1-4-1961	20 x 40 x 1.5 G	3.24	0.79	0.08	4.11
		W. Germany	6-4-1961	19 $\frac{3}{4}$ x 39 $\frac{1}{2}$ x 16 G	2.73	0.71	0.06	3.50
		W. Germany	23-12-1961	20' x 40" x 16 G	3.23	0.78	0.19	4.20
		Belgium	8-3-1961	Plain Zinc Sheets 3' x 8' x 18, 20, 22, 24, 28 & 30 SWG 4' x 8' x 18, 20, 22, & 24 SWG }	1.64	0.71	0.03	2.38
		Belgium	23-5-1961	8' x 4' x 20, 22 & 24 SWG	1.61	0.70	0.05	2.36

4	Vieille-Mantagne, Liege (through Indian Embassy, Belgium).	Belgium	Quotation .	36' x 96' x SWG15, Ordinary Commercial quality zinc sheets, purity 98-98, 5%.	1.61	..	..	..
5	Societe Ame Metallurgi- que de Prayon, Trooz, (through Indian Embas- sy, Belgium).	Belgium	Quotation .	Zinc sheets-(98% purity)- 8' x 4' and 8' x 3', 2° 15 SWG.	1.58	..	..	..
<i>Zinc strips</i>								
1	Metals & Ores Co., Cal- cutta.	Australia	Quotation .	Zinc strips	1.76	..	..	..



# APPENDIX

(Vide Paragraph

Statement showing the selling prices of

Source of information	Brass rods				Pure cop-	
	1/4" dia	1/2" dia	3/8" dia	1 1/4" dia	2" dia	1" dia
	1	2	3	4	5	6
<b>Producers :</b>						
1. National Pipe & Tubes Co. Ltd., Calcutta.	4.92 (a)	..	4.62 (a)	..	4.62 (a)	5.54 (b) 6.03 (c)
2. Metals & Ores Co., Calcutta.	..	..	..	..	..	..
3. Standard Metal Works Pvt. Ltd., Bombay.	..	..	..	..	..	..
4. Jaipur Metals & Electricals Ltd., Jaipur.	..	..	..	..	..	5.65 (d)
5. Devidayal (Sales) Pvt. Ltd., Bombay.	..	..	..	..	..	..
6. Kamani Tubes Pvt. Ltd., Bombay.	6.02 (f)	..	..	5.52 (f)	..	..
<b>Consumers :</b>						
7. Oriental Metal Pressing Works Pvt. Ltd., Bombay.	..	..	6.00	..	..	..
8. J. K. Machines Ltd., Calcutta.	..	..	..	..	..	..

# XI

15.2)

## non-ferrous semi-manufactures

(Rs. per Kg.)

per rods	Pure copper tubes		Zinc Strips for Bat-teries	Addresso-graph Zinc Sheets	Photo-engraver Zinc Sheets	Lead she-ets, com-mercial & Chemi-cally pure	Remarks
1" dia	$\frac{1}{2}" \times 16$ SWG	$2\frac{1}{4}" \times 10$ SWG					
8	9	10	11	12	13	14	15
5.54 (b)	8.32 (b)	7.50 (b)	..	..	..	..	(a) F. O. R. Kanki-nara. Central Ex-cise & Sales Tax extra.
6.02 (c)	8.62 (c)	7.80 (c)					(b) For electroly-tic. (c) For Arsenical.
..	..	..	2.72	3.40	3.44	..	
..	..	..	..	..	..	1.65	
..	..	..	..	..	..	..	(d) For Arsenical Sizes not mentio-ned.
..	11.60 (e)	..	..	..	..	..	(e) Net ex-godown at Bhandup. Ta-xes extra.
..	..	..	..	..	..	..	(f) F. O. R., Bom-bay.
..	..	..	..	..	..	..	
..	..	..	3.15	..	..	..	



1	2	3	4	5	6	7
9. Southern Railway, Ma- dras.	..	..	..	..	..	10.00 (g)
10. Tata Chemicals Ltd., Bombay.	7.00	5.92	..	5.87	7.30	..
11. Indian Iron & Steel Co. Ltd., Calcutta.	6.62	6.06	5.62	6.06	6.37	8.75
12. Integral Coach Fac- tory, Perambur.	6.25	..	..	..	..	..
13. British India Electric Construction Co. Ltd., Calcutta.	6.75 (i)	..	..	..	..	7.16 (j)
14. Man Industrial Corp. Ltd., Jaipur.	..	5.05	..	..	..	..
15. Auto Accessories (India) Private Limited, Bom- bay.	3.20	..	..	..	..	..
16. The Director General of Supplies & Dis- posals, New Delhi.	..	..	..	..	..	..
17. Gun Carriage Factory, Jabalpur.	..	..	..	..	..	..
18. Rifle Factory, Ishapore	..	..	..	..	..	..
19. Ordnance Factory, Deh- ra Dun.	..	..	..	..	..	..
20. Ordnance Factory, Khamaria.	..	..	..	..	..	..
21. Gun & Shell Factory, Cossipore.	..	..	..	..	..	..
22. Estrela Batteries Ltd., Bombay.	..	..	..	..	..	..
23. Indian Telephone In- dustries Limited, Ban- galore.	..	..	..	5.75 (k)	..	..
24. BEST Undertaking, Bombay.	7.00	..	..	..	..	..
25. Western Railway, Bom- bay.	..	..	..	..	..	7.11
26. Northern Railway, New Delhi.	..	..	..	..	..	7.60 (l)
27. Vanaz Engineers Pvt. Ltd., Bombay.	6.00	6.28	6.00	..	5.51	7.95

8	9	10	11	12	13	14	15
..	..	..	..	..	..	..	(g) Sizes not mentioned.
6.90	..	..	..	..	..	1.76	
..	7.16	..	..	..	..	2.20	(h) For sheets of
..	..	..	..	..	..	1.59	(h) 1/32" thickness.
..	..	..	..	..	..	..	(i) For 1/4" to 2 1/4" dia.
..	..	..	..	..	..	..	(j) For sizes from 5/16" to 2 1/4" dia.
..	..	..	..	..	..	..	
..	..	..	..	..	..	..	
..	..	..	..	..	..	1.74	
..	..	..	..	..	..	3.63	
..	..	..	..	..	..	1.87	
..	..	..	..	..	..	3.44	
..	..	..	..	..	..	1.78	
..	..	..	..	..	..	1.79	
..	..	..	2.73	..	..	..	
5.00	..	..	..	..	..	..	(k) For sizes ranging from 0.64" to 1.292".
..	..	..	..	..	..	..	
..	..	..	..	..	..	2.00	
..	..	..	..	..	..	1.74	(l) Sizes not mentioned.

1	2	3	4	5	6	7
<i>Local Market:</i>						
28. Bhimraj Bechardas & Co., Bombay.	7.50 to 7.75	6.25	6.25	6.40	6.40	10.00
29. Bombay Metal Syndi- cate, Bombay.	..	..	6.20	6.40	6.60	..
30. Amritlal Chhotalal & Co., Bombay.	8.00	6.50	6.40	6.40	6.60	10.00
31. Shah & Co. Bombay. .	..	..	..	..	..	..

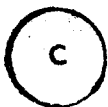


सत्यमेव जयते

8	9	10	11	12	13	14	15
10.00	14.00	14.00	..	..	..	..	} Prices are inclusive of taxes.
..	..	..	..	..	..	..	
10.00	14.00	14.25	..	..	..	..	
..	..	..	6.00 to 6.50	..	..	..	



सत्यमेव जयते



**India, Tariff (——Commission)**

**Report on the Continuance of  
Protection to the Non-ferrous  
Metals Industry—1962**



सत्यमेव जयते